Department of Transportation
Olympia, Washington 98504

April 27, 2011

ATTENTION: All Bidders and Planholders

I-90
SNOWSHED TO KEECHELUS DAM PHASE 1C-REPLACE SNOWSHED AND ADD LANES
10Y018
STATE PROJECT

Addendum No. 1

The Special Provisions, Plans, and Proposal for this project are amended as follows:

Special Provisions

1. On Page 119, line 17 is deleted and replaced with the following:

   ***
   http://www.wsdot.wa.gov/Projects/I90/SnoqualmiePassEast/I90contractorinfo.htm
   ***

2. On Page 119, line 24 is deleted and replaced with the following:

   http://www.wsdot.wa.gov/Projects/I90/SnoqualmiePassEast/I90contractorinfo.htm

3. On Page 119, the following is added after line 40:

   Proposal Forms
   The first paragraph of Section 1-02.5 is deleted and replaced with the following:

   (******)
   At the request of a prequalified Bidder, the Contracting Agency will provide a physical Proposal Form for any project on which the Bidder is eligible to Bid. For certain projects selected at the sole discretion of the Contracting Agency, the Bidder may also be authorized to access an electronic Proposal Form for submittal via Trns·Port Expedite® software and BidExpress®.

4. On Page 119, the following is added after line 42:

   Section 1-02.6 is deleted and replaced with the following:

   (******)

The Contracting Agency will accept only those Proposals properly executed on physical forms it provides, or electronic forms that the bidder has been authorized to access. Unless it approves in writing, the Contracting Agency will not accept Proposals on forms attached to the Plans and stamped “Informational”.

All prices shall be in legible figures (not words) written in ink or typed, and expressed in U.S. dollars and cents. The Proposal shall include:

1. A unit price for each item (omitting digits more than four places to the right of the decimal point),

2. An extension for each unit price (omitting digits more than two places to the right of the decimal point), and

3. The total Contract price (the sum of all extensions).

In the space provided on the signature sheet, the Bidder shall confirm that all Addenda have been received.

The Bidder shall submit with the Bid a completed Disadvantaged Business Enterprises (DBE) Utilization Certification, when required by the Special Provisions. For each and every DBE firm listed on the Bidder’s completed DBE Utilization Certification, the Bidder shall submit written confirmation from that DBE firm that the DBE is in agreement with the DBE participation commitment that the Bidder has made in the Bidders completed DBE Utilization Certification. WSDOT Form 422-031 EF (DBE Written Confirmation Document) is available for this purpose. ONLY in the event that the Bidder is NOT ABLE to document in their completed DBE Utilization Certification that they have met the DBE Condition of Award Goal, the Bidder shall prepare DBE Good Faith Effort documentation in accordance with the DBE Participation Condition of Award Specifications. Directions for delivery of the DBE Written Confirmation Documents and DBE Good Faith Effort documentation are included in Section 1-02.9 Delivery of Proposal and Section 1-02.10 Withdrawing, Revising or Supplementing Proposal.

The Bidder shall submit with the Bid a list of:

1. Subcontractors who will perform the work of heating, ventilation and air conditioning, plumbing as described in Chapter 18.106 RCW and electrical as described in Chapter 19.28 RCW, and

2. The work those Subcontractors will perform on the Contract.

3. Shall not list more than one Subcontractor for each category of work identified, except, when Subcontractors vary with Bid

alternates, in which case the Bidder shall identify which Subcontractor will be used for which alternate.

If no Subcontractor is listed, the Bidder acknowledges that it does not intend to use any Subcontractor to perform those items of work.

Proposals of corporations shall be signed by the officer or officers having authority to sign them. If a Bidder is a copartnership, the Proposal shall be signed by an authorized member of the copartnership. When the Bidder is a joint venture, the Proposal shall be signed by one or more individuals as authorized by the Joint Venture.

5. On Page 120, the following is added after line 47:

Bid Deposit
Section 1-02.7 is deleted and replaced with the following:

(******)
A deposit of at least 5-percent of the total Bid shall accompany each Bid. This deposit may be cash, certified check, cashier's check, or a proposal bond (Surety bond). For projects that are selected by the Contracting Agency to be bid electronically, the proposal bond may be in either a physical format, or an electronic format via Surety2000.com or Insurevision.com and BidExpress®. When a physical bid deposit or proposal bond is furnished to accompany an electronic Proposal Form, the Bid deposit shall be received by the Contracting Agency at the location specified for receipt of bids prior to the time set for receipt of Bids. Any proposal bond shall be on a form acceptable to the Contracting Agency and shall be signed by the Bidder and the Surety. A proposal bond shall not be conditioned in any way to modify the minimum 5-percent required. The Surety shall:

1. be registered with the Washington State Insurance Commissioner, and

2. appear on the current Authorized Insurance List in the State of Washington published by the Office of the Insurance Commissioner.

The failure to furnish a Bid deposit of a minimum of 5-percent with the Bid or as a physical supplement to the electronic Proposal Form shall make the Bid nonresponsive and shall cause the Bid to be rejected by the Contracting Agency.

Delivery of Proposal
Section 1-02.9 is deleted and replaced with the following:

(******)

For projects scheduled for bid opening in Olympia, each Proposal shall be sealed and submitted in the envelope provided with it, or electronically via Trns·Port Expedite® software and BidExpress® at the location and time identified in Section 1-02.12. The Bidder shall fill in all blanks on this envelope to ensure proper handling and delivery.

For projects scheduled for bid opening in other locations, each Proposal shall be sealed and submitted in the envelope provided with it, at the location and time identified in Section 1-02.12. The Bidder shall fill in all blanks on this envelope to ensure proper handling and delivery.

The Contracting Agency will not open or consider any Proposal or any supplement to a Proposal that is received after the time specified for receipt of Proposals, or received in a location other than that specified for receipt of Proposals.

NOTE: Certain documents that are required for an electronic Bid Proposal to be responsive CANNOT be submitted electronically via Trns·Port Expedite® software and BidExpress®. These documents include:

1. DBE Written Confirmation Documents; and,

2. Good Faith Effort Documentation; and,

3. Cash, certified checks, cashier's checks, or a proposal bond (Surety bond) in formats other via Surety2000.com or Insurevision.com.

The Bidder shall provide all documents that are required for an electronic Bid Proposal to be responsive (but cannot be submitted electronically via Trns·Port Expedite® software and BidExpress®) as a supplement to their electronic Bid Proposal in one of the following methods:

1. Physically in a sealed envelope marked as "BID SUPPLEMENT" and bearing the Bidders company name, project title, Bid date, and description of contents (for example: DBE Written Confirmation, DBE Good Faith Efforts, Proposal Deposit, etc.); or,

2. Except for Item #3 above, by facsimile to the following FAX number: (360) 705-6966.

E-mailed submittals are not acceptable. The Contracting Agency is not responsible for delayed, partial, failed, illegible or partially legible FAX document transmissions, and such documents may be rejected as incomplete at the Bidder's risk.

Withdrawal or Revision of Proposal
Section 1-02.10 is deleted and replaced with the following:

(******)
Withdrawing, Revising, or Supplementing Proposal
After submitting a physical Bid Proposal to the Contracting Agency, the Bidder may withdraw, revise, or supplement it if:

1. The Bidder submits a written request signed by an authorized person, and

2. The Contracting Agency receives the request before the time set for receipt of Proposals.

The original physical Bid Proposal may be supplemented, or revised and resubmitted as the official Bid Proposal if the Contracting Agency receives it before the time set for receipt of Proposals. Faxed Bid revisions and supplements will be accepted only if they are submitted in accordance with the "Example Format for Facsimile Bid Changes" instructions posted on the WSDOT website at http://www.wsdot.wa.gov/biz/contaa/bulletin/.

E-mailed requests to withdraw, revise or supplement a Proposal are not acceptable. The Contracting Agency is not responsible for delayed, partial, failed, illegible or partially legible FAX document transmissions, and such documents may be rejected as incomplete at the Bidders risk.

The Contracting Agency will not accept requests to revise or withdraw electronic Bid Proposals. Such requests shall be furnished directly to BidExpress® and in accordance with their terms and conditions.

6. On Page 121, the following is added after line 21:

Irregular Proposal
Item 1 in Section 1-02.13 is deleted and replaced with the following:

(******)
1. A Proposal will be considered irregular and will be rejected if:

   a. The Bidder is not prequalified;

   b. The authorized Proposal Form furnished by the Contracting Agency is not used or is altered;

   c. The completed Proposal form contains any unauthorized additions, deletions, alternate Bids, or conditions;

   d. The Bidder adds provisions reserving the right to reject or accept the Award, or enter into the Contract;

e. A price per unit cannot be determined from the Bid Proposal;

f. The Proposal form is not properly executed;

g. The Bidder fails to submit or properly complete a Subcontractor list, if applicable, as required in Section 1-02.6;

h. The Bidder fails to submit or properly complete a Disadvantaged Business Enterprise Utilization Certification, if applicable, as required in Section 1-02.6;

i. The Bidder fails to submit written confirmation from each DBE firm listed on the Bidder's completed DBE Utilization Certification that they are in agreement with the bidders DBE participation commitment, if applicable, as required in Section 1-02.6, or if the written confirmation that is submitted fails to meet the requirements of the Special Provisions;

j. The Bidder fails to submit DBE Good Faith Effort documentation, if applicable, as required in Section 1-02.6, or if the documentation that is submitted fails to demonstrate that a Good Faith Effort to meet the Condition of Award was made; or

k. The Bid Proposal does not constitute a definite and unqualified offer to meet the material terms of the Bid invitation.

7. Page 121, line 42 through Page 122, line 2 is revised to read as follows:

The Contractor shall be responsible for setting, maintaining, and resetting all alignment stakes, slope stakes, and grades necessary for the construction of structures, walls, differential barrier, moment slab barrier, and Snow Nets. Except for the reinforcement survey for the rock cuts [~~, the staking for differential barrier, the staking for moment slab barrier,~~] and the survey control data to be furnished by the Contracting Agency, calculations, surveying, and measuring required for setting and maintaining the necessary lines and grades shall be the Contractor's responsibility.

The Contracting Agency will mark the locations for the pattern and provisional (spot) reinforcement on the final face of the rock cuts (see the **Sequencing of Rock Excavation and Stabilization Support** subsection in Special Provision **ROADWAY EXCAVATION AND EMBANKMENT**). [~~The Contracting Agency will stake the locations for placement of differential barrier and moment slab barrier.~~]

8. On Page 124, lines 21 through 23 are revised to read as follows:

Contract work to be performed using contractor-provided staking [~~stakes~~] shall not begin until the staking is [~~stakes are~~] approved by the Contracting Agency. Such approval shall not relieve the Contractor of responsibility for the accuracy of the staking [~~stakes~~].

9. On Page 128, the following is added after line 46:

I-90, MP 62.14 to MP 67.30 Eastbound/Westbound
A WSDOT pavement repair project

10. On Page 137, the following is added after line 12:

Load Limits for the Upper Resort Creek Access Road
The Upper Resort Creek Access Road follows the old Sunset Highway. The existing culvert along the old Sunset Highway has not been analyzed for loading limits. Any damage to the existing culvert due to the Contractor's operation, that occurs prior to the time for removal of the culvert, shall be repaired immediately at no additional cost to the Contracting Agency.

Upper Resort Cr. Culvert Repl. shall be designed in accordance with the live load specifications and other design criteria specified in the **Precast Concrete Panels** subsection of Special Provision **CONCRETE STRUCTURES**. Trucks traveling along the Upper Resort Creek Access Road shall cross this precast reinforced concrete three sided structure one at a time, regardless of the direction of travel over the structure. At no time shall the Contractor exceed the live load specified for Upper Resort Cr. Culvert Repl. Any damage to Upper Resort Cr. Culvert Repl. due to the Contractor's operation shall be repaired immediately at no additional cost to the Contracting Agency.

11. On Page 140, the following is added after line 14:

5. All secondary containment shall be designed to contain petroleum products.

12. On Page 142, lines 39 through 44 are revised to read as follows:

The Work Zone Clear Zone (WZCZ) applies during working and nonworking hours. The WZCZ applies only to temporary roadside objects introduced by the Contractor's operations and does not apply to preexisting conditions or permanent Work. Permanent Work shall be executed in a manner which does not create a safety hazard for the travelling public. Those work operations that are actively in progress shall be in accordance with adopted and approved Traffic Control Plans, and other contract requirements.

13. On Page 144, lines 23 through 27 are revised to read as follows:

During the construction of the DE11 and DW11 detours, the Contractor will be allowed to have single lane closures during one week from Monday at 8:00 pm through Friday at 9:00 am. The Contractor shall submit a plan and a working day schedule that shows how this work will be accomplished during the specified single lane closure period.

14. On Page 144, lines 46 through 50 are revised to read as follows:

During the construction of the DE13 and DW13 Tie-in for Slide Curve Bridge, the Contractor will be allowed to have single lane closures during one week from Monday at 8:00 pm through Friday at 9:00 am. The Contractor shall submit a plan and a working day schedule that shows how this tie-in work will be accomplished during the specified single lane closure period.

15. On Page 145, lines 1 through 5 are revised to read as follows:

During the construction of the LE and LW lanes (LE 1334+00 to LE 1368+00 [~~1364+75~~] and LW 1335+95 to LW 1369+30 [~~1366+10~~]), the Contractor will be allowed to have single lanes closures during one week from Monday at 8:00 pm through Friday at 9:00 am. The Contractor shall submit a plan and a working day schedule that shows how this work will be accomplished during the specified single lane closure period.

16. On Page 153, lines 12 through 18 are revised to read as follows:

By October 15 of each construction season, the Contractor shall complete the placement of the end diaphragms, intermediate diaphragms [~~diaphragm~~], and deck for any girders placed during that construction season at either Slide Curve Br. or Lake Keechelus Snowshed Repl. The Contractor shall provide to the Engineer an over winter stability analysis of all completed superstructure segments. A segment shall consist of girder, deck, and diaphragms. End of season construction joints in the deck shall be allowed only between girders or at expansion joints.

17. On Page 155, line 29 is revised to read as follows:

10. Begin culvert extensions at Resort Creek and the construction of bridges at Unnamed Creek at MP 59.7.

18. On Page 155, the following is added after line 37:

13. After diverting Resort Creek and receiving the Engineer's approval of the construction schedule for the Upper Resort Creek Site, the Contractor shall remove the existing culvert, construct the channel at Upper Resort Creek, and install Upper Resort Cr. Culvert Repl.

19. On Page 156, lines 26 through 27 are revised to read as follows:

10. Complete culvert extensions at Resort Creek and the construction of bridges at Unnamed Creek at MP 59.7 as shown in the Plans.

20. On Page 157, lines 9 through 11 are revised to read as follows:

4. The construction of Wall 8 [~~Slide Curve Median SE Wall~~] (LW Sta. 1395+50 to LW Sta. 1423+00) and Resort Cr. Br. WB shall begin after detours DE12 and DW12 are in place.

21. On Page 158, lines 16 through 17 are deleted and replaced with the following:

7. The construction of Wall 24 (LW Sta.1349+00 to LW Sta. 1351+06) and Wall 8 (LW Sta. 1375+84.67 to LW Sta. 1395+50) shall begin.

22. On Page 159, line 12 is revised to read as follows:

6. The construction of Wall 8 [~~Slide Curve Median SE Wall~~] shall be completed.

23. On Page 159, lines 14 through 15 are revised to read as follows:

7. Permanent drainage structures (from LW Sta. 1369+30 [~~1366+10~~] to LW Sta. 1428+90.97) and BMPs shall be placed in accordance with the Plans.

24. On Page 159, lines 17 through 22 are deleted and replaced with the following:

8. After the placement of the Snowshed girders, the existing roadway will be re-channelized for the detour alignments DE13 and DW13 as shown in the Plans (See the Detour Plan – Stage 3 sheets).

9. The final WB Roadway (LW Sta. 1335+95 to LW Sta. 1428+90.97) shall be constructed with the exception of the right lane and right shoulder (LW Sta. 1335+95 to LW Sta. 1369+30).

25. On Page 159, lines 51 through 52 are revised to read as follows:

5. Commissioning of Special Construction [~~Commissioning of Life Safety Systems and Equipment~~] shall take place upon completion of the Lake Keechelus Snowshed Repl.

26. On Page 160, lines 2 through 4 are revised to read as follows:

6. Permanent drainage structures (from LE Sta. 1314+39.28 to LE Sta. 1425+66.81 and from LW Sta. 1335+95 to LW Sta. 1369+30 [~~1366+10~~]) and BMPs shall be placed in accordance with the Plans.

27. On Page 160, lines 9 through 10 are revised to read as follows:

8. The final WB Roadway (LW Sta. 1335+95 to LW Sta. 1369+30 [~~1366+10~~]) shall be completed.

28. On Page 161, lines 3 through 8 are revised to read as follows:

    1. The Contractor shall protect all completed Work and Work in progress in areas not used by traffic. This includes removing snow from uncompleted bridge structures and from completed bridges structures not being used by traffic. For the completed Resort Creek Br. EB, Resort Creek Br. WB, [~~Slide Curve Bridge,~~] Unnamed Creek at MP 59.7 Br. EB, and Unnamed Creek at MP 59.7 Br. WB, the maximum allowable snow depth is 15 feet. For the completed Slide Curve Bridge, the maximum allowable snow depth is 9.5 feet.

29. On Page 165, the following is added after line 46:

*** HMA Cl. 3/8 In. PG 64-28 ***	*** 0.90 gal/ton ***
*** HMA For Preleveling Cl. 3/8 In. PG 64-28 ***	*** 0.90 gal/ton ***
*** HMA For Pavement Repair Cl. 3/8 In. PG 64-28 ***	*** 0.90 gal/ton ***

30. Page 180, line 50 through Page 181, line 7 is deleted and replaced with the following:

    The Contractor shall avoid or minimize activities in the temporary impact area, defined as the area extending 15 feet out from the staked construction limits. The Engineer will stake the clearing limits. The Contractor shall place HVSF or HVF as staked by the Engineer. Where wetlands or associated buffers are present in the temporary impact area, the clearing limits will be the staked construction limits. In non-wetland or non-sensitive buffer areas, the clearing limits will be staked 15 feet out from the staked construction limits. The Contractor may work in, place foreign materials in, or access wetlands and their associated sensitive buffer areas within the 15-foot temporary impact areas, when necessary and with the Engineer's approval of the Temporary Impact Plan.

31. On Page 181, lines 9 through 12 are revised to read as follows:

    A Temporary Impact Plan shall be submitted a minimum of 10 days prior to any work that is required within the temporary impact area that may impact wetlands [~~wetlands,~~] and/or their buffers [~~in the temporary impact areas~~]. All costs associated with the development and submittal of this plan shall be included in the bid prices for the various items of work planned for these areas. The plan shall include the following:

32. On Page 181, lines 23 through 30 are revised to read as follows:

    Work [~~Excavation or fill work~~] shall not begin in these wetland or buffer areas until the Engineer has approved the appropriate submittal in writing.

Temporary impact area wetlands and buffers which undergo any clearing, [~~grubbing,~~] addition of foreign material, or other earthwork activities shall be restored in accordance with Special Provision **TEMPORARY IMPACT AREA RESTORATION**. The Contracting Agency estimates 4.0 acres of wetlands and buffers are within the temporary impact areas.

33. On Page 183, lines 15 through 17 are revised to read as follows:

This work shall consist of restoring the impacted wetland and sensitive buffer areas [~~staked for restoration~~] within the temporary impact areas. [~~The temporary impact areas extend 15 feet out from the slope stakes.~~]

34. On Page 183, lines 27 through 28 are revised to read as follows:

The Engineer will stake the wetland and sensitive buffer areas which require permanent restoration. Permanent restoration work shall include the following:

35. On Page 183, lines 38 through 39 are revised to read as follows:

All costs associated with restoring wetland and sensitive buffer areas, staked for restoration within the temporary impact areas, will be paid for under the various bid items involved.

36. On Page 185, lines 10 through 15 are deleted and replaced with the following:

Removal of Abandoned Buried Power Cable
The Contractor is advised that there is abandoned buried power cable from CW Sta. 5190+40 to CW Sta. 5271+35 which continues along the old Sunset Highway through the Townsend Creek and Sunset Highway Mitigation Sites. The Contractor shall remove this power cable by cutting it flush with the ground whenever it is encountered during construction.

37. On Page 189, lines 28 through 30 are deleted and replaced with the following:

The Contractor shall schedule the drainage structure removal work during the stream diversion work in Townsend Creek and Resort Creek. The Contractor shall notify the Contracting Agency 30-calendar days prior to removing the existing culvert at the Upper Resort Creek Site. The Contractor will be limited to a 2 week total closure of the adjacent property owner's access. The Contractor shall provide a construction schedule detailing the duration for which the adjacent property owner's access will be affected. The Contractor shall not proceed with any work that affects the adjacent property owner's access until the Contracting Agency provides approval of the Contractor's construction schedule in writing. See Special Provision **TEMPORARY STREAM DIVERSION** for additional construction requirements.

38. On Page 194, the following is added after line 34:

- LW Sta. 1349+00.00 to LW Sta. 1352+50.00

39. On Page 194, line 51 is deleted and replaced with the following:

    http://www.wsdot.wa.gov/Projects/I90/SnoqualmiePassEast/I90contractorinfo.htm

40. On Page 195, lines 23 through 27 are revised to read as follows:

    No sidecasting of excavated material in the direction of Keechelus Lake will be allowed during work bench construction. The AR1 and AR6 Work Benches shall be sloped back away from the lake, or have a berm and erosion control, until their final configuration is in place. All Roadway Excavation Incl. Haul - Area C work which requires lane closures shall be done at night. See the **Lane Closures** subsection of Special Provision ***Construction Under Traffic*** for allowed lane closure times.

41. On Page 196, the following is added after line 10:

    All Roadway Excavation Incl. Haul - Area _____ work which requires lane closures shall be done at night. See the **Lane Closures** subsection of Special Provision ***Construction Under Traffic*** for allowed lane closure times.

42. On Page 196, the following is added after line 18:

    (******)

    Construction of the Upper Resort Creek Access Road

    The Upper Resort Creek Access Road follows the old Sunset Highway. The Contractor shall prepare the surface of the Upper Resort Creek Access Road by means of clearing and grubbing, minor grading, and surfacing as needed for the Contactor's operations. Any aggregate used for surfacing in areas of the roadway which are designated in the Plans for restoration, shall be removed in its entirety prior to completing the restoration of the roadway.

43. On Page 198, line 1 is deleted and replaced with the following:

    http://www.wsdot.wa.gov/Projects/I90/SnoqualmiePassEast/I90contractorinfo.htm

44. On Page 199, line 4 is deleted and replaced with the following:

    http://www.wsdot.wa.gov/Projects/I90/SnoqualmiePassEast/I90contractorinfo.htm

45. On Page 200, lines 3 through 8 are revised to read as follows:

The Contractor shall remove loose rock and soil from existing rock slopes that are to remain or from [~~to~~] danger slopes above the slope stakes at locations shown in the Plans or as designated by the Engineer, and shall remove and dispose of all rock slope scaling debris generated by the work. This work also includes end of season safety scaling of existing rock slopes and partially completed rock cut slopes as designated by the Engineer.

46. On Page 203, the following is added after line 25:

Any existing or detour roadway, any barrier gap, or existing or temporary concrete barrier damaged due to the Contractor's operations shall be repaired or replaced at the Contractor's expense as designated by the Engineer.

47. On Page 203, lines 35 through 47 are revised to read as follows:

The Contractor shall retain the services of a recognized blasting consultant to assist in the blast design. The blasting consultant shall be on-site during the drilling of all blast holes, during the loading for each blast, and during each blast. The blasting consultant shall be an expert in the field of drilling and blasting who derives his primary source of income from providing specialized blasting and/or blasting consulting services. The blasting consultant shall not be an employee of the Contractor, explosive manufacturer, or explosive distributor. Not later than the preconstruction conference, the Contractor shall submit a resume of the credentials of the proposed blasting consultant for approval by the Engineer. The resume shall include a list of at least 5 highway rock excavation projects in steep mountainous terrain over 5 years on which the blasting consultant has worked. The list shall contain a description of the project, details of the blast plans, and names of the project owners with sufficient knowledge to verify the submitted information.

48. On Page 205, lines 49 through 51 are revised to read as follows:

Controlled Blasting Near Soil Nail Walls and Fiber Reinforced Shotcrete

The Contractor shall use controlled blasting methods to minimize overbreak and impact to installed fiber reinforced shotcrete and the following soil nail wall systems:

49. On Page 209, line 31 is deleted and replaced with the following:

http://www.wsdot.wa.gov/Projects/I90/SnoqualmiePassEast/I90contractorinfo.htm

50. On Page 209, the following is added after line 49:

(******)

All costs to prepare and maintain the surface of the Upper Resort Creek Access Road as specified, except for Clearing and Grubbing, shall be included in the bid items for the construction of Wall 8. Clearing and Grubbing will be paid at the unit contract price per acre for "Clearing and Grubbing".

51. On Page 224, lines 5 through 9 are revised to read as follows:

A. This work consists of furnishing, installing, protecting, and initial testing of the instrumentation used to monitor for slope deformation related to the rock excavations. [~~Upon written performance acceptance of the instrumentation by the Engineer, the Contracting Agency will assume the responsibility of instrumentation maintenance and data monitoring.~~]

52. On Page 224, lines 18 through 36 are revised to read as follows:

A. An Instrumentation Specialist shall be retained by the Contractor and be pre-approved by the Contracting Agency. The Instrumentation Specialist may be an independent individual or employee of an engineering firm, geotechnical field instrumentation system integrator, or similar organization, but may not be an employee of the Contractor. The Instrumentation Specialist shall have a minimum of 10 years of experience in designing, installing and monitoring geotechnical field instrumentation systems in general and a minimum of 5 years of experience with automated data acquisition systems for geodetic and geotechnical data called for on this Project. The Instrumentation Specialist shall be present whenever new instrumentation is installed and shall be retained until the Contracting Agency accepts the installed instruments and associated data acquisition systems. Upon written performance acceptance of the strain gage and piezometer instrumentation systems by the Engineer, the Contracting Agency will assume the responsibility of instrumentation maintenance and data monitoring for these systems for the duration of the Contract.

B. Each construction season, the initial Automatic Motorized Total Station (AMTS) Monitoring of prisms on the rock slopes shall be performed under the direction of an AMTS Specialist with a minimum of 5 years of experience with data-logger-interfaced AMTS to web-based SQL databases. The AMTS instruments shall be removed at the end of each construction season and shall be reinstalled at the beginning of each subsequent construction season as designated by the Engineer. The AMTS Specialist shall be present whenever [~~new~~] AMTS systems are installed and shall be retained each construction season until the Contracting Agency accepts the installed AMTS systems. Upon written performance acceptance of each AMTS system by the Engineer, the Contracting Agency will assume the responsibility of instrumentation maintenance and data monitoring for that AMTS system for the duration of the construction season.

53. On Page 224, lines 47 through 51 are deleted and replaced with the following:

E. Prior to final acceptance by the Engineer, each instrumented dowel shall stream data for 2 weeks via the specified data acquisition system to the specified web-based data platform.

F. Prior to the Engineer accepting the AMTS system for the duration of the current construction season, each AMTS tower/instrument shall stream data for 2 weeks via the specified data acquisition system to the specified web-based data platform. Each AMTS tower/instrument shall be monitoring at least one prism installed on the rock slopes plus back sight prisms during this 2-week data streaming period.

54. On Page 230, lines 34 through 46 are revised to read as follows:

AMTS telemetry shall be accomplished through a Leica based AMTS – IRIS control program, utilizing ATR software to accurately read each prism, as provided by Geo-Instruments, 2100 196th 36 Street, SW, Suite 109 Lynnwood WA, (800) 477-2506. It shall be configured to run on the Campbell Scientific Inc, CR800/1000 data logger as a Gateway platform to control and store data from the AMTS, using PakBus protocol to send data via spread spectrum radio to the ADAS Base Station (also a CR800/1000). All parts of the system in the field shall be powered by solar panels. Power from generators that require refueling will not be allowed on a regular basis. The geodetic data shall be retrieved by CSI LoggerNet automatic polling of the Base Station and FTP forwarded along with other data tables to the Contracting Agency's account of ATLAS web-based database as described in the **Automatic Data Acquisition System (ADAS) Base Station** subsection of this Special Provision. Other databases similar to ATLAS will be allowed if it proves to be an advantage to the Contracting Agency <u>as determined by the Engineer</u>.

55. On Page 231, lines 2 through 7 are revised to read as follows:

Whenever prisms need to be installed, the Contractor shall install the prisms. Installed prisms shall remain in place over the winter season. <u>The Contractor shall remove AMTS instruments by winter shutdown and shall remount them</u> [~~The Contracting Agency will remove AMTS instruments by winter shutdown and will remount them~~] for measurements the next construction season <u>as designated by the Engineer</u>. The Contractor is advised that the Contracting Agency will continue prism monitoring for each rock cut for a minimum of two (2) calendar months after the rock excavation has been completed to ditch grade.

56. On Page 231, line 43 is revised to read as follows:

<u>Each construction season, the acceptance</u> [~~Acceptance~~] of the AMTS system shall be based on the following:

57. On Page 232, lines 26 through 30 are revised to read as follows:

The lump sum contract price for "Monitoring Prism System with AMTS" shall be full pay for furnishing, installing, removing, protecting and testing the instrumentation equipment; initial streaming of the data at the beginning of each construction season; and any materials, labor, and equipment required to perform the work as specified and detailed in the Plans including full pay for the retained AMTS Specialist, and full pay to remove the instruments at the end of each construction season, store them during the winter shutdown period, and install them at the beginning of each subsequent construction season.

58. On Page 238, lines 41 through 43 are revised to read as follows:

All water used for the purpose of material compaction and dust control shall be metered. All water used for [~~paid for under~~] Bid items other than "Water" shall be measured with a separate meter.

59. On Page 244, lines 45 through 51 are revised to read as follows:

The Contractor shall remove sufficient material from Crystal Springs Sno-Park to enable meeting the final Grading Plans for this site. The Contracting Agency estimates the quantity to be removed from this site and incorporated into the Project to be 108,610 [~~160,730~~] cubic yards. All of the available material at Crystal Springs Sno-Park, which is not used to provide the materials in the bulleted list above and is not needed for the final grading, shall be used as embankment material within the project limits from MP 57.34 to MP 60.23.

60. On Page 245, lines 2 through 10 are revised to read as follows:

The Contracting Agency estimates that, of the 200,000 [~~250,000~~] cubic yards of material stockpiled, a minimum combined total of 70,000 [~~87,500~~] cubic yards for crushed surfacing base course, backfill for structural earth wall incl. haul, gravel backfill for wall, and gravel borrow for geosynthetic ret. wall incl. haul is available after processing.

The Contracting Agency estimates that, after processing, a minimum of 29,000 [~~20,000~~] cubic yards of fine material is available to substitute for silt loam to blend with compost to make Topsoil Type A (see ***Topsoil Type A*** in the **Materials** subsection of Special Provision **ROADSIDE RESTORATION**).

61. On Page 245, line 16 is deleted and replaced with the following:

http://www.wsdot.wa.gov/Projects/I90/SnoqualmiePassEast/I90contractorinfo.htm

62. On Page 246, lines 23 through 29 are deleted.

63. On Page 249, the following is added after line 5:

Upper Resort Creek Site
The site work at the Upper Resort Creek Site shall be completed upon approval of the Contractor submitted Roadside Work Plan. For the site restoration work window, see the ***Construction Requirements*** subsection of Special Provision **TEMPORARY STREAM DIVERSION**.

64. On Page 252, the following is added after line 24:

The third sentence of the first paragraph of Section 5-04.3(5)E is deleted and replaced with the following:

(******)
Pavement that is damaged as a result of the Contractor's operations shall be repaired by the Contractor to the satisfaction of the Project Engineer at no cost to the Contracting Agency. The pavement repair shall be completed prior to traffic returning to the area with the pavement damage.

65. On Page 252, lines 33 through 38 are deleted.

66. On Page 252, the following is added after line 43:

Vacant
Section 5-04.3(6) including title is deleted and replaced with the following:

(******)
Pothole Patching
The Contractor shall patch potholes as directed by the Engineer including all work associated with patching potholes.

67. On Page 256, the following is added after line 10:

(******)
"Force Account – Pothole Patching", by force account as provided in Section 1-09.6.

To provide a common Proposal for all Bidders, the Contracting Agency has entered an amount in the Proposal to become a part of the Contractor's total Bid.

68. On Page 261, line 38 is deleted and replaced with the following:

http://www.wsdot.wa.gov/Projects/I90/SnoqualmiePassEast/I90contractorinfo.htm

69. On Page 262, the following is added after line 29:

(BSP July 9, 2007)

Temporary Bridge

The Contractor shall design, furnish, erect, maintain, and remove a temporary bridge, including substructure, in accordance with this Special Provision and the details shown in the Plans.

Geometric and Design Requirements

The temporary bridge shall conform to the following geometric requirements:

1. The temporary bridge shall be an overall minimum length from the toe of the supporting foundation to the toe of the supporting foundation of:
   Temporary Bridge No. 1 = 14.0 feet
   Temporary Bridge No. 2 = 13.0 feet
   Temporary Bridge No. 3 = 19.0 feet
   Temporary Bridge No. 4 = 13.0 feet
   Temporary Bridge No. 5 = 14.0 feet
   Temporary Bridge No. 6 = 13.0 feet
   Temporary Bridge No. 7 = 14.0 feet
   Temporary Bridge No. 8 = 13.0 feet

2. The minimum roadway width on the temporary bridge including a minimum of 3 feet of traffic barriers slide distance shall be:
   Temporary Bridge No. 1 = 8.0 feet
   Temporary Bridge No. 2 = 7.0 feet
   Temporary Bridge No. 3 = 11.0 feet
   Temporary Bridge No. 4 = 10.0 feet
   Temporary Bridge No. 5 = 8.0 feet
   Temporary Bridge No. 6 = 7.0 feet
   Temporary Bridge No. 7 = 8.0 feet
   Temporary Bridge No. 8 = 7.0 feet

3. Unless otherwise approved by the Engineer, the profile of the roadway deck shall be as specified in the Plans.

4. The temporary bridge foundations shall be placed at least two feet from the face of the geosynthetic retaining wall.

The temporary bridge shall conform to the following design requirements:

1. The temporary bridge shall be designed in accordance with the latest edition of the AASHTO LRFD Bridge Design Specifications.

2. The vehicular live load used for design shall be 75 percent of HL-93, minimum.

3. The driving surface of the temporary bridge shall be durable, skid resistant deck, with an initial skid number of at least 35 and maintaining a skid number of 26 minimum, in accordance with AASHTO T 242.

4. Notwithstanding the requirements of Section 1-06.1, the materials used by the Contractor to compose the temporary bridge may be used (second hand), provided that the use of such used materials shall be subject to visual inspection and approval by the Engineer. For used (second hand) steel materials where the grade of steel cannot be positively identified, the design stresses for the steel shall conform to Section 6-02.3(17)B.

5. The foundation of the temporary bridge shall be designed for a maximum bearing pressure of 350 psf

Submittals
The Contractor shall submit six copies of working drawings and two copies of supporting design calculations to the Engineer for approval in accordance with Section 6-01.9. The submittal shall include an erection plan and procedure in accordance with Section 6-03.3(7)A.

Construction and Removal
The Contractor shall construct the temporary bridge in accordance with the working drawings and erection plan as approved by the Engineer, environmental permit conditions specified in Section 1-07.5 as supplemented in these Special Provisions and as shown in the Plans, and in accordance with the details shown in the Plans. The Contractor shall maintain the temporary bridge, including the driving surface, for the life of the temporary bridge in this project.

After the temporary bridge is no longer needed, or upon request of the Engineer, the Contractor shall remove the temporary bridge and shall restore the site to its original natural landscape to the satisfaction of the Engineer. Upon removal, the temporary bridge shall become the property of the Contractor.

Payment
Payment will be made in accordance with Section 1-04.1 for the following bid item:

"Temporary Bridge___", lump sum.

70. On Page 266, the following is added after line 11:

(April 7, 2008)
Split Face Finish
The split face finish shall be accomplished by the use of either a form liner selected from the approved products listed in the WSDOT Qualified

Products List (QPL), latest edition, or a form liner approved by the Engineer as an equal product. For approval of form liners not listed in the current WSDOT QPL, the Contractor shall submit four copies of the request, along with catalogue cuts and other descriptive supporting information, as follows:

1. Two sets to the Project Engineer

2. Two sets, accompanied by a 2 foot square physical sample of the form liner, to the State Bridge and Structures Architect, addressed as follows:

If sent via US Postal Service:

Washington State Department of Transportation
State Bridge and Structures Architect
P. O. Box 47340
Olympia, WA 98504-7340

If sent via FedEx:

Washington State Department of Transportation
State Bridge and Structures Architect
7345 Linderson Way SW
Tumwater, WA 98501-6504

The height of the form liner shall be equal to or greater than the height of the formed surface. Only elastomeric form liners are allowed to have horizontal splices.

71. On Page 278, the following is added after line 8:

(April 7, 2008)
Split Face Finish
Form liners shall be placed with the joints normal to grade for barrier applications and vertical (or as shown in the Plans) for other applications. Horizontal joints in the elastomeric form liners are permitted on surfaces greater than 8 feet in height provided that the minimum form liner panel height and width dimensions are 8 feet by 6 feet, respectively.

72. On Page 278, lines 37, 38, 43, 46, and 47; ageing is revised to read as aging.

73. On Page 279, lines 4, 8, 9, 24, and 30; ageing is revised to read as aging.

74. On Page 286, the following is added after line 35:

Splicing

Section 6-02.3(24)D is supplemented with the following:

(BSP January 4, 2010)
Splicing of Hoop Reinforcement for Columns and Shafts
When the Plans show steel reinforcement bar hoops as the confinement reinforcement for columns and shafts, the hoops shall be spliced by one of the following methods:

1. Welded direct butt splice.

2. Resistance butt weld.

3. Mechanical splice, if shown in the plans, conforming to Section 6-02.3(24)F as supplemented in these Special Provisions, provided that concrete cover and steel reinforcing bar clearance requirements are met for the splice.

4. Welded lap splice if shown in the Plans, welded in accordance with Section 6-02.3(24)E as supplemented in these Special Provisions, with job control testing in accordance with Section 6-02.3(24)G as supplemented in these Special Provisions.

Hoop reinforcement for columns shall be fabricated in the shop. Weld splicing of hoop reinforcement for shafts shall be completed prior to assembly of the shaft steel reinforcing bar cage. Mechanical splicing of hoop reinforcement may be accomplished in the field during assembly of the steel reinforcing bar cage.

The Contractor shall stagger the placement of the hoop reinforcement splices as shown in the Plans. For columns with interlocking hoops, the hoop reinforcement splices shall be located in the column interior.

Hoop Reinforcement Splice Testing Requirements
The Contractor shall designate in writing a splicing Quality Control Manager (QCM). The QCM shall be responsible directly to the Contractor for the quality of all hoop reinforcement splicing including the inspection of materials and workmanship performed by the Contractor and all subcontractors, and submitting, receiving, and approving all correspondence, required submittals, and reports regarding hoop reinforcement splicing to and from the Engineer.

Qualification testing and testing of production sample splices shall be performed at an independent qualified testing laboratory at no additional expense to the Contracting Agency. The laboratory shall have the following:

1. Proper facilities, including a tensile testing machine capable of breaking full size samples of steel reinforcing bar splices.

2. Operators who have received formal training for performing the testing requirements of ASTM A 370.

3. A record of annual calibration of testing equipment performed by an independent third party that has standards that are traceable to the National Institute of Standards and Technology and a formal reporting procedure, including published test forms.

Nondestructive testing for welded direct butt splices may be performed where the hoops are fabricated.

For the purpose of job control testing, a lot of welded lap spliced hoop reinforcement is defined as 200, or fraction thereof, for each bar diameter used in the work.

For the purpose of production testing, a lot of hoop reinforcement splices is defined as one of the following:

1. 150, or fraction thereof, of the same type of mechanical splices used for each bar diameter and each bar deformation pattern that is used in the work, or

2. 150, or fraction thereof, of complete joint penetration butt welded splices or resistance butt welded splices for each bar diameter used in the work.

The Engineer will select the splices which will compose the lot and also the splices within each lot to be tested.

The Contractor may negotiate a reduced sampling rate or increased lot size provided production control and job control testing demonstrates a splice rejection rate satisfactory to the Engineer.

Whenever a lot of splices is rejected, the rejected lot and subsequent lots of splices shall not be used in the work until the following requirements are met:

1. The QCM performs a complete review of the Contractor's quality control process for these splices.

2. A written report is submitted to the Engineer describing the cause of failure of the splices in this lot and provisions for preventing similar failures in future lots.

3. The Engineer has provided the Contractor with written notification that the report is acceptable.

Splice Qualification Report

The Contractor shall submit a Splice Qualification Report. This report shall include splice material information, names of the operators who will be performing the splicing, and descriptions of the positions,

locations, equipment, and procedures that will be used in the splice work.

The Splice Qualification Report shall also include certifications from the fabricator for qualifications of operators and procedures based on sample tests performed no more than two years before submitting the report. Each operator shall be certified by performing two sample splices for each bar size of each splice type that the operator will be performing in the work. For deformation-dependent types of splice devices, each operator shall be certified by performing two additional samples for each bar size and deformation pattern that will be used in the work.

Qualification sample splices shall be tested by an independent qualified testing laboratory and shall conform to the appropriate production test criteria. The Splice Qualification Report shall include the certified test results for all qualification sample splices.

The QCM shall review and approve the Splice Qualification Report before submitting it to the Engineer for approval. The Contractor shall allow 14 calendar days for the review and approval of a complete report before performing any hoop reinforcement splicing operations.

Splice Test Criteria

Resistance butt weld and mechanical splice samples shall be destructively tested as follows. Production control and quality assurance sample splices shall be tensile tested in accordance with ASTM A 370.

The Contractor shall supply additional materials for all destructive production control and quality assurance testing.

Samples shall achieve at least 125 percent of the specified yield strength of the bar. In addition, necking of the bar shall be evident at rupture regardless of whether the bar breaks inside or outside the splice.

Production control samples of welded direct butt splices shall be sampled, radiographically inspected, and repaired as described in the **Nondestructive Splice Tests** subsection of Section 6-02.3(24)E as supplemented in these Special Provisions. Quality assurance samples shall be destructively tested as described above.

Production Control Test Requirements for Splices

Production control tests shall be performed for all hoop reinforcement splices used in the work. A production control test for resistance butt welds and mechanical splices shall consist of testing four sets of sample splices removed from each lot of completed splices.

After the splices in a lot have been completed, the QCM shall notify the Engineer in writing that the splices in this lot conform to the specifications and are ready for testing.

After notification has been received, the Engineer will randomly select the four sample splices to be removed from the lot to be tested by an independent qualified testing laboratory.

At least one week before sample testing, the Contractor shall notify the Engineer in writing of the date and location of the testing.

If only three of the four sample splices from a lot conform to the requirements of the **Splice Test Criteria** subsection of this Special Provision, the Engineer shall select an additional set of four samples for re-test from the same lot of splices. Should any of the four sample splices from this additional test fail to conform to these requirements, all splices in the lot will be rejected.

Should only one or two sample splices from a lot conform to the requirements of the **Splice Test Criteria** subsection of this Special Provision, all splices in the lot will be rejected.

Welded direct butt splice defects shall be repaired as described in the **Nondestructive Splice Tests** subsection of Section 6-02.3(24)E as supplemented in these Special Provisions.

Reporting Test Results

A Production Control Test Report for all testing performed on each lot shall be prepared by the independent testing laboratory performing the testing and submitted to the QCM for review and approval. The report shall be signed by an engineer who represents the laboratory and is licensed as a Civil Engineer under Title 18 RCW, State of Washington. The report shall include, as a minimum, the following information for each test:

1. Contract number.
2. Dates received and tested.
3. Lot number.
4. Bar diameter, hoop diameter, and bar length.
5. Type of splice.
6. Brand and type of mechanical splice.
7. Length of test specimen.

8. Physical condition of the test sample splice and description of break and location in relation to splice.

9. Any noticeable defects.

10. Ultimate tensile strength of each splice.

11. Results of radiographic inspection for welded direct butt splices.

The QCM shall review, approve, and forward each Production Control Test Report to the Engineer for review before the splices represented by the report are encased in concrete. The Engineer will have three working days to review each Test Report and respond in writing after a complete report has been received.

Welding Reinforcing Steel

Section 6-02.3(24)E is supplemented with the following:

(BSP January 4, 2010)
Splicing Requirements for Hoop Reinforcement

Welded Direct Butt Splices

Welded direct butt splices shall be complete joint penetration butt welds conforming to ANSI/AWS D1.4 figure 3.2 and 6-02.3(24)E. Split pipe backing shall not be used.

Thermite welding is not allowed.

Weld procedures to be used in making welded direct butt splices, and the welders performing the welds, shall be qualified by tests performed by the Contractor on sample splices of the type to be used, before making splices to be incorporated into the work. Evidence of prior qualifications shall conform to Section 6-02.3(24(E).

Nondestructive Splice Tests

Radiographic examinations shall be performed on 25 percent of all complete joint penetration butt welded splices from a lot as defined in the **Hoop Reinforcement Splice Testing Requirements** subsection of Section 6-02.3(24)D as supplemented in these Special Provisions. The Engineer will select the splices within each lot to be radiographically examined. All splices shall be 100 percent visually inspected.

All required radiographic examinations shall be performed by the Contractor in accordance with ANSI/AWS D1.4 and this Special Provision.

Before radiographic examination, welds shall conform to ANSI/AWS D1.4 Section 4.4. Radiographic acceptance shall be in accordance with ANSI/AWS D1.4 Table 4.1. Acceptance criteria for bar size #7 shall be the same as for bar size #8.

Should more than 12 percent of the splices which have been radiographically examined in any lot be defective, an additional 25 percent of the splices, selected by the Engineer from the same lot, shall be radiographically examined. Should more than 12 percent of the cumulative total of splices tested from the same lot be defective, all remaining splices in the lot shall be radiographically examined.

Additional radiographic examinations performed due to the identification of defective splices shall be performed at no additional expense to the Contracting Agency.

All defects shall be repaired in accordance with ANSI/AWS D1.4, latest edition.

The Contractor shall notify the Engineer in writing a minimum of 48 hours before performing any radiographic examinations.

The radiographic procedure used shall conform to ANSI/AWS D1.1, ANSI/AWS D1.4 Section 7.9, and the following:

1. Two exposures shall be made for each splice. For each of the two exposures, the radiation source shall be centered on each bar to be radiographed. The first exposure shall be made with the radiation source placed at zero degrees from the top of the weld and perpendicular to the weld root and identified with a station mark of "0". The second exposure shall be at 90 degrees to the "0" station mark and shall be identified with a station mark of "90". When obstructions prevent a 90 degree placement of the radiation source for the second exposure, and when approved in writing by the Engineer, the source may be rotated, around the centerline of the steel reinforcing bar, a maximum of 25 degrees.

2. If more than one weld is to be radiographed during one exposure, the angle between the root line of each weld and the direction to the radiation source shall not be less than 65 degrees.

3. Radiographs shall be made by either X-ray or gamma ray. Radiographs made by X-ray or gamma rays shall have densities of not less than 2.3 nor more than 3.5 in the area of interest. A tolerance of 0.05 in density is

allowed for densitometer variations. Gamma rays shall be from the iridium 192 isotope and the emitting specimen shall not exceed 0.18 inches in the greatest diagonal dimension.

4. The radiographic film shall be placed perpendicular to the radiation source at all times; parallel to the root line of the weld unless source placement determines that the film shall be turned; and as close to the root of the weld as possible.

5. The minimum source to film distance shall be maintained so as to ensure that all radiographs maintain a maximum geometric unsharpness of 0.020 at all times, regardless of the size of the steel reinforcing bars.

6. Penetrameters shall be placed on the source side of the bar and perpendicular to the radiation source at all times. One penetrameter shall be placed in the center of each bar to be radiographed, perpendicular to the weld root, and adjacent to the weld. Penetrameter images shall not appear in the weld area.

7. When radiography of more than one weld is being performed per exposure, each exposure shall have a minimum of one penetrameter per bar, or three penetrameters per exposure. When three penetrameters per exposure are used, one penetrameter shall be placed on each of the two outermost bars of the exposure, and the remaining penetrameter shall be placed on a centrally located bar.

8. An allowable weld buildup of 0.16 inch may be inserted to the total material thickness when determining the proper penetrameter selection. No image quality indicator equivalency will be accepted. Wire penetrameters or penetrameter blocks shall not be used.

9. Penetrameters shall be sufficiently shimmed using a radiographically identical material. Penetrameter image densities shall be a minimum of 2.0 and a maximum of 3.6.

10. Radiographic film shall be Class 1, regardless of the size of the steel reinforcing bars.

11. Radiographs shall be free of film artifacts and processing defects, including, but not limited to, streaks, scratches, pressure marks or marks made for the purpose of identifying film or welding indications.

12. Each splice shall be clearly identified on each radiograph and the radiograph identification and marking system shall be established between the Contractor and the Engineer before radiographic inspection begins. Film shall be identified by lead numbers only; etching, flashing or writing in identifications of any kind will not be permitted. Each piece of film identification information shall be legible and shall include, as a minimum, the following information:

    a. The Contractor's name.

    b. The name of the nondestructive testing firm.

    c. Contract number.

    d. Date of the test.

    e. Initials of the radiographer.

    f. Part number.

    g. Weld number.

    The letter "R" and repair number shall be placed directly after the weld number to designate a radiograph of a repaired weld.

13. Radiographic film shall be developed within a time range of one minute less to one minute more than the film manufacturer's recommended maximum development time. Sight development will not be allowed.

14. Processing chemistry shall be done with a consistent mixture and quality, and processing rinses and tanks shall be clean to ensure proper results. Records of all developing processes and any chemical changes to the developing processes shall be kept and furnished to the Engineer upon request. The Engineer may request, at any time, that a sheet of unexposed film be processed in the presence of the Engineer to verify processing chemical and rinse quality.

15. The results of all radiographic interpretations shall be recorded on a signed certification and a copy kept with the film packet.

Technique sheets prepared in accordance with ASME Boiler and Pressure Vessels Code Section V Article 2 Section T-291 shall

also contain the developer temperature, developing time, fixing duration and all rinse times.

The Contractor shall maintain the radiographs and the radiographic inspection report(s) in the shop until the Engineer reviews them or request them to be sent to the Materials Engineer, Department of Transportation, PO Box 47365, Olympia, WA 98504-7365, within two working days following this request. The Contractor shall mail the film and two copies of the radiographic inspection report. If the Engineer reviews them in the shop then the film and reports shall be released to the Engineer for permanent record keeping at that time. Adequate facilities and equipment shall be provided the Engineer for examining film, if performed in the shop.

If the Engineer does not review the film and reports in the shop, within ten working days of completion of the lot, all reports and film shall be sent to the Materials Engineer, Department of Transportation, PO Box 47365, Olympia, WA 98504-7365. The Contractor shall mail the film and two copies of the radiographic inspection report.

Resistance Butt Welded Splices

Shop produced resistance butt welds shall be produced by a fabricator and equipment approved by WSDOT to perform this operation.

Before manufacturing steel reinforcing bar hoops using resistance butt welding, the Contractor shall submit the fabricator's quality control manual for the fabrication of hoops to the Engineer for approval. The quality control manual shall include, but not be limited to, the following:

1. The pre-production procedures for the qualification of material and equipment.

2. The methods and frequencies for performing quality control procedures during production.

3. The calibration procedures and calibration frequency for all equipment.

4. The welding procedure specification for resistance welding.

5. The method for identifying and tracking lots.

Welded Lap Splices

Welded lap splices, if shown in the Plans, shall be fabricated in the shop or at the jobsite prior to assembling into the steel

reinforcing cage. All production splices shall be 100 percent visually inspected for weld quality, size and length. Job control samples shall be selected in accordance with Section 6-02.3(24)G.

Mechanical Splices

Section 6-02.3(24)F is supplemented with the following:

(BSP January 4, 2010)
Mechanical Splices
Mechanical splices used to splice hoop reinforcement for columns and shafts shall be or have been qualified to the minimum requirements of the **Splice Test Criteria** subsection of Section 6-02.3(24)D as supplemented in these Special Provisions.

All operators installing mechanical splices shall be qualified by testing as described in the **Splice Qualification Report** subsection of Section 6-02.3(24)D as supplemented in these Special Provisions.

Job Control Testing

Section 6-02.3(24)G is supplemented with the following:

(BSP January 4, 2010)
Quality Assurance Test Requirements for Hoop Reinforcement Splices
The Engineer will select job control samples for testing at the WSDOT HQ Materials Laboratory at a minimum rate of two sample hoops per project, and 1 sample hoop per two lots. Sample hoops will be selected at random where the hoop splices are constructed.

The Contractor shall provide sufficient additional spliced hoops for job control testing at no additional expense to the Contracting Agency.

Job control samples shall be sent to the WSDOT HQ Materials Testing Laboratory for quality assurance testing. Hoop splice samples shall be prepared by the Contractor so as not to disturb the character of the splice. The sample shall be 5'-6" in length or as specified by the Engineer, with the splice centered on the specimen. Each end of the hoop splice sample shall be straightened a minimum of 12 inches to accommodate the tensile testing machine.

75. On Page 286, lines 38 through 48 are deleted.

76. On Page 299, the following is added after line 38:

Welded Stainless Steel Turning Vane Plenum	4	Each

77. On Page 299, the following is added after line 51:

Temperature Sensor (TS) controller	1	Est.
Fiber Optic Sensor Cable	CLF	98
Turnbuckle and Tension Cable System	1	Est.

78. On Page 300, line 3 is revised to read as follows:

Install Variable Message Signs [~~(OFCI)~~]	8	Each

79. On Page 300, the following is added after line 9:

8 Strand, MM Fiber Optic	5	CLF
LED Traffic Signal Head	6	Each
Traffic Controller Cabinet	1	Each
Furnish and Install Camera Bracket	22	Each
Furnish and Install VMS Brackets	8	Each

80. On Page 300, the following is added after line 34:

Foam Cabinet	3	Each

81. Page 302, line 48 through Page 303, line 3 is deleted and replaced with the following:

(******)
"Upper Resort Cr. Culvert Repl.", lump sum.

The lump sum contract price for "Upper Resort Cr. Culvert Repl." shall be full pay for performing the work as specified for this precast reinforced concrete three sided structure, including footings, slab bases, wingwalls, and cutoff walls.

82. On Page 302, lines 28 through 31 are revised to read as follows:

All costs in connection with producing *** granite block, [~~and~~] cascadian stone, <u>and split face</u> *** finish on concrete surfaces as specified shall be included in the unit contract price per cubic yard for "Conc. Class _____". If the concrete is to be paid for other than by class of concrete then the costs shall be included in the applicable adjacent item of work.

83. On Page 303, lines 20 through 24 are deleted.

84. On Page 304, the following is added after line 31:

(BSP June 26, 2000)
"Longitudinal Seismic Restrainer", per each.

85. On Page 304, lines 48 through 51 are deleted.

86. On Page 305, lines 10 and 11; Ageing is revised to read as Aging.

87. On Page 329, line 14 is revised to read as follows:

Product	Manufacturer
[~~Novagel~~]	[~~Geo-Tech Services, LLC~~ ~~220 North Zapata Highway, Suite 11A~~ ~~Laredo, TX 78043-4464~~]
ShorePac GCV	CETCO 1500 West Shure Drive Arlington Heights IL, 60004
SlurryPro CDP	KB International, LLC Suite 216, 735 Broad Street Chattanooga, TN 37402-1855
[~~Super Mud*~~]	[~~PDS Company~~ ~~8140 East Rosecrans Ave.~~ ~~Paramount, CA 90723-2754~~]

88. On Page 329, line 16 is deleted.

89. On Page 339, lines 4 through 7 are revised to read as follows:

E. The Contractor shall use appropriate means such as a cleanout bucket, smooth mouth grab, or air lift to clean the bottom of the excavation of all shafts. No more than 2 inches of loose or disturbed material shall be present at the bottom of the shaft just prior to placing concrete.

90. On Page 340, lines 22 through 27 are revised to read as follows:

b. [~~shall~~] be at the site prior to introduction of the slurry into the first drilled hole requiring slurry [~~a drilled hole~~], and

c. [~~shall~~] remain at the site during the construction [~~and completion~~] of the first [~~a minimum of one~~] shaft excavated to adjust the slurry mix to the specific site conditions.

91. On Page 341, the following is added after line 42:

2. When synthetic slurry is used, the Contractor shall keep a written record of all additives and concentrations of the additives in the synthetic slurry. These records shall be provided to the Engineer once the slurry system has been established in the first drilled shaft on the project. The Contractor shall provide revised data to the Engineer if changes are made to the type or concentration of additives during construction.

92. On Page 341, line 43, the paragraph number is revised to read as follows:

3. [~~2.~~]

93. On Page 341, line 50, the paragraph number is revised to read as follows:

4. [~~3.~~]

94. On Page 342, line 9, the paragraph number is revised to read as follows:

5. [~~4.~~]

95. On Page 342, lines 34 through 45 are revised to read as follows:

G. The Contractor shall dispose of the slurry and slurry contacted soils as specified in the shaft installation plan as approved by the Engineer, and in accordance with the following requirements:

1. Water slurry with no additives may be infiltrated to uplands within the confines of the Contracting Agency Right Of Way for the project, provided that the groundline at the disposal site is at least five feet above the current water table, and that disposal operations conform to the temporary erosion and sedimentation control (TESC) requirements established for this project. For the purposes of water slurry disposal, upland is defined as an area that has no chance of discharging directly to waters of the State, including wetlands or conveyances that indirectly lead to wetlands or waters of the State.

Spoils in contact with this slurry may be disposed of as clean fill.

96. On Page 342, lines 47 through 49 are deleted and replaced with the following:

2. Synthetic slurry and water slurry with polymer based additives shall be contained and disposed of by the Contractor at an approved facility. Spoils in contact with synthetic slurry or water slurry with polymer-based additives shall be contained and disposed of by the Contractor at an approved waste facility. Prior to beginning shaft excavation operations, the Contractor shall coordinate with the waste facility operator and the Jurisdictional Health Department (JHD) to determine requirements for shaft spoils disposal at the facility. The Contractor shall submit the location of the waste facility, requirements for disposal of shaft spoils (as approved by the waste facility operator and the JHD), copies of any permits required and obtained, and any associated test results to the Engineer prior to disposal. The Contractor shall stockpile spoils on 6-mil plastic and cover with 6-mil plastic to protect from runoff until approval from the waste facility operator and JHD is given to dispose of spoils.

97. On Page 342, the following is added after line 50:

3. Mineral slurry may be infiltrated to uplands within the confines of the Contracting Agency Right Of Way for the project, provided that the

groundline at the disposal site is at least five feet above the current water table, and that disposal operations conform to the temporary erosion and sedimentation control (TESC) requirements established for this project. For the purposes of mineral slurry disposal, upland is defined as an area that has no chance of discharging directly to waters of the State, including wetlands or conveyances that indirectly lead to wetlands or waters of the State.

Spoils in contact with mineral slurry may be disposed of in accordance with Section 2-03.3(7)C.

98. On Page 345, the following is added after line 9:

The Standard Specification Section 6-02.3(6) restriction for 5'-0" maximum free-fall shall not apply to placement of Class 4000P concrete into a shaft.

99. On Page 350, lines 11 through 12 are revised to read as follows:

6. "Casing Shoring", per linear foot, including all costs in connection with removing the casing shoring and placing seals when required.

100. On Page 350, lines 22 through 23 are deleted and replaced with the following:

9. "St. Reinf. Bar For Shaft", per pound.
The unit contract price per pound for "St. Reinf. Bar For Shaft" shall include all costs in association with furnishing and installing steel reinforcing bar centralizers.

101. On Page 355, lines 18 through 20 are revised to read as follows:

The Contractor shall deliver 10 new [~~unused~~] units (125 linear feet) of Precast Conc. Barrier Type 42 In. 2 Sided F-Shape and 4 new [~~unused~~] units (50 linear feet) of Precast Conc. Barrier Type 42 In. 1 Sided F-Shape to the following location:

102. On Page 355, lines 42 through 45 are deleted and replaced with the following:

(******)
When traffic is being moved to its final configuration, the Contractor shall move existing F-Shape precast barrier and place and anchor it in its final location between LE Sta. 1314+39.28 (23.00' RT.) and LE Sta. 1333+89.12 (23.00' RT.) as shown in the Plans.

103. On Page 356, lines 42 through 47 are deleted and replaced with the following:

(******)
Barrier Mounted Hydrant Locator Reflectors
Reflectors for identifying the location of above and below ground hydrants shall be 2-inch high, blue reflective strips placed on 22-inch long aluminum sheeting. The reflective strips for hydrant locator reflectors shall be type III, IV, V or VII reflective sheeting and shall be selected from approved

materials listed in the Qualified Products List. Aluminum sheeting shall conform to the requirements of Section 9-28.8.

Hydrant locator reflectors shall be placed on the recessed portion of the traffic face of barrier with the top edge of the reflector four inches down from the top of the barrier. Reflectors shall be installed such that there is one reflector centered above each underground hydrant and one reflector centered on each of the barrier sections that, in the direction of travel, come just before the above ground fire hydrant boxes. The surface of the barrier where the reflector is applied shall be free of dirt, curing compound, moisture, paint, or any other material that would adversely affect the bond of the adhesive. The reflectors shall be installed with very high bond (VHB) acrylic adhesive foam tape that conforms to the requirements specified in the **Concrete Surface Mounted Signs** subsection of Special Provision **PERMANENT SIGNING**.

104. On Page 357, the following is added after line 45:

(******)
All costs associated with furnishing and installing barrier mounted hydrant locator reflectors shall be included in the bid items for the concrete barrier on which they are mounted.

105. On Page 358, the following is added after line 8:

The unit Contract price per linear foot for “Contractor Furnished Temporary Conc. Barrier” shall be full pay for all costs to furnish the barrier, complete the initial installation, and maintain the barrier at the initial installed location.

The unit contract price per linear foot for "Contractor Furnished Temporary Conc. Barrier" shall also include all costs for furnishing, placing, maintaining, replacing, and cleaning barrier delineation for the barrier units at their initial installation location.

106. On Page 358, the following is added after line 33:

(******)
The following paragraph is added immediately following the bid item, “Removing and Resetting Existing Permanent Barrier”:

> The unit contract price per linear foot for "Removing and Resetting Existing Permanent Barrier" shall include all costs for removing anchor pins, moving the barrier, providing anchor pins, and anchor pinning the barrier at the new location.

107. On Page 361, the following is added after line 40:

(******)

FIRE HYDRANT BOX

Description
The Contractor shall furnish and install fire hydrant protection boxes as indicated in the Plans.

Materials
Steel angle and bar shall conform to ASTM A 36, ASTM A 992, or ASTM A 572, and shall be protected against corrosion by hot-dip galvanized in accordance with AASHTO M 111.

Steel plate, door, latch mechanism, and hinge shall be Type 316 stainless steel.

Anchor bolts shall conform to Section 9-6.5(4) or shall be resin bonded anchors in accordance with these Special Provisions.

Construction Requirements

Submittals
The Contractor shall submit shop drawings and weld procedures for the fire hydrant box to the Engineer in accordance with Sections 6-03.3(7) and 6-03.3(25). These drawings shall include but not be limited to the following:

1. Plan, elevation, and sections of all components, with dimensions and tolerances.

2. All material designations.

3. Corrosion protection system used on the metal components.

Corrosion Protection
All steel surfaces shall be painted in accordance with Section 6-07.3(11) and the color of the final coat shall be Federal Standard Color No. 30045.

Measurement
Fire hydrant boxes will be measured by the unit for each box furnished and installed.

Payment
Payment will be made, in accordance with Section 1-04.1, for the following bid item when it is included in the proposal:

"Fire Hydrant Box", per each.

108. On Page 361, the following is added after line 42:

Measurement

Section 6-11.4 is supplemented with the following:

(******)
Concrete fascia panel for wall 10A will be measured by the square foot surface area of the completed fascia panel, measured to the neat lines of the panel as shown in the Plans.

109. On Page 361, the following is added after line 47:

All costs in connection with constructing the concrete fascia panels as specified shall be included in the unit Contract price per square foot for "Concrete Fascia Panel For Wall 10A", including all steel reinforcing bars, premolded joint filler, polyethylene bond breaker strip, joint sealant, PVC pipe for weep holes, exterior surface finish, and pigmented sealer (when specified).

110. On Page 361, the following is added after line 48:

(******)
ANCHOR ROD

Description

The Contractor shall furnish and install an anchor rod system between Wall 1 and the reinforced concrete anchor blocks. An anchor rod system shall be a non-stressed permanent soil nail structural system used to transfer tensile loads from the concrete retaining wall to the anchor block.

Materials

The Contractor shall either select an anchor rod system from the Qualified Products List for soil nails, or submit the following information to the Engineer for approval:

1. Catalogue cuts or Manufacturer's Certificates of Compliance for centralizers and grout admixtures.

2. Manufacturer's Certificate of Compliance for bearing plates, nuts, steel reinforcing bars, tendon encapsulation tubing, and welded shear studs. The Manufacturer's Certificate of Compliance for the nuts shall confirm compliance with the specified strength requirements.

If the Contractor selects a permanent anchor rod system from the Qualified Products List (QPL), the Contractor shall submit, to the Engineer, a certificate from the permanent anchor rod system fabricator/supplier confirming that the material specifications of the permanent soil nail system components as furnished conform to those specified in the QPL submittal as approved by WSDOT.

Component Material Specifications

Bearing plates shall conform to ASTM A 36, ASTM A 529, ASTM A 536, ASTM A 572, ASTM A 588, or AASHTO M 270.

Grout shall be a neat cement grout or a sand-cement grout conforming to Section 9-20.3(1). The compressive strength for the grout shall be as required by the soil nail manufacturer and as approved by the Engineer. Grout components shall be as follows:

Admixtures shall conform to the requirements of Section 9-23.6. Expansive admixtures and accelerators will not be permitted. Admixtures shall be mixed in accordance with the manufacturer's recommendations.

Aggregates shall conform to the requirements of Section 9-03.

Cement shall conform to the requirements of Section 9-01, and shall not contain lumps or other indications of hydration.

Nuts shall conform to either AASHTO M 291, Grade B, Hexagonal, ASTM A 536 Grade 100-70-03, ASTM A 29 Grades 12L14, 1215, or C1045, AASHTO M 169 Grades 1117 or 12L14, ASTM A 513 Type 5 Grade 1026, ASTM A 521 Class CF, ASTM A 897 Grade 125/80/10M, or ASTM A 519 Grade 1026, and shall be capable of developing 100 percent of the GUTS of the anchor rod. The nuts shall be fitted, where necessary, with a special wedge washer or spherical seat such that the nut bears uniformly on the bearing plate.

Washers shall conform to either AASHTO M 293, ASTM A 536 Grade 80-55-06 or ASTM A 47 Grade 32510.

Anchor rods shall be deformed steel reinforcing bars conforming to AASHTO M 31, Grade 60 minimum, and Section 9-07.2. All anchor rods shall be epoxy-coated in accordance with Sections 6-02.3(24)H and 9-07.3. The anchor rods shall be of the type and size specified in the Plans. The anchor rods shall not be spliced. The anchor rods shall be threaded at the bearing plate end a minimum of six inches. The threading shall be continuous spiral deformed ribbing. Alternatively, threads may be cut into the anchor rod if the bar size is increased to the next larger size from the size specified in the Plans at no additional cost to the Contracting Agency.

Anchor rod encapsulation shall be fabricated from one of the following:

1. High density corrugated polyethylene (PE) tubing conforming to the requirements of ASTM D 3350 Class PE335520C or Class PE335400C, ASTM D 1248, and AASHTO M 252 and having a nominal wall thickness of 40 mils.

2. Corrugated, polyvinyl chloride (PVC) tubing conforming to ASTM D 1784, Class 13464-B, and having a nominal wall thickness of 40 mils.

The anchor rods shall be centralized within the sheathing with a minimum 0.2 inch grout cover over the anchor rod inside the sheath. The encapsulation shall be constructed at the factory under controlled conditions. The encapsulation shall run the full length of the anchor rod except the rod length required for bearing plat and nut installation. Field construction of the encapsulation will not be permitted.

Construction Requirements

The anchor rod system shall be installed as shown in the Plans. The anchor rod system shall not be tensioned. The nuts shall be installed snug tight.

Measurement

Anchor rods will be measured by the unit for each anchor rod furnished and installed.

Payment

Payment will be made, in accordance with Section 1-04.1, for the following bid item when it is included in the proposal:

"Anchor Rod", per each.

111. Page 365, line 38 through Page 366, line 1; Page 366, lines 11 through 26; and Page 367, lines 11 through 26 are each deleted and replaced with the following:

MSE Plus Wall

MSE Plus is a registered trademark of SSL, LLC.

SSL, LLC
4740-Scotts Valley Drive Suite E
Scotts Valley, CA 95066
(831) 430-9300
FAX (831) 430-9340
www.mseplus.com

Reinforced Earth Wall

Reinforced Earth is a registered trademark of the Reinforced Earth Company.

The Reinforced Earth Company
88 Inverness Circle East Suite E-101
Englewood, CO 80112
(303) 790-1481
FAX (303) 790-1461
www.reinforcedearth.com

112. Page 366, lines 28 through 44, and Page 367, lines 28 through 44 are each deleted and replaced with the following:

Reinforced Soil Wall

Reinforced Soil is a registered trademark of Hilfiker Retaining Walls.

Hilfiker Retaining Walls
1902 Hilfiker Lane
Eureka, CA 95503-5711
(707) 443-5093
FAX (707) 443-2891
www.hilfiker.com

Retained Earth Wall

Retained Earth is a registered trademark of Reinforced Earth Company.

The Reinforced Earth Company
88 Inverness Circle East Suite E-101
Englewood, CO 80112
(303) 790-1481
FAX (303) 790-1461
www.reinforcedearth.com

113. On Page 367, lines 2 through 9 are deleted and replaced with the following:

ARES Modular Panel Wall System

ARES Modular Panel Wall System is a registered trademark of Tensar Corporation

Tensar Corporation
2500 Northwinds Parkway Suite 500
Atlanta, GA 30009
(770) 344-2090
FAX (678) 281-8546
www.tensarcorp.com

114. On Page 369, the following is added after line 24:

Payment

The paragraph in Section 6-13.5 which follows the bid item “Structural Earth Wall”, per square foot, is deleted and replaced with the following:

(******)

All costs in connection with furnishing materials for, and constructing, structural earth walls, including constructing leveling pads when specified, and all costs for constructing the alcoves for Wall 8, shall be included in the unit Contract price per square foot for “Structural Earth Wall”.

115. On Page 369, line 27 is deleted.

116. On Page 369, the following is added after line 34:

All costs in connection with constructing the alcoves for Walls 3 and 6, and all costs in connection with constructing the concrete fascia panels as specified shall be included in the unit Contract price per square foot for "Concrete Fascia Panel – Geosynthetic Walls", including all steel reinforcing bars, premolded joint filler, polyethylene bond breaker strip, joint sealant, PVC pipe for weep holes, exterior surface finish, and pigmented sealer (when specified).

117. On Page 370, lines 31 through 32 are revised to read as follows:

The Contractor shall place a geomembrane on the top and sides of the mechanical, communication and water tank rooms as shown in the Plans. When the rooms have a wall penetration for utility conduits, the Contractor shall install a boot in the blockout of the wall in accordance with the manufacturer's recommendations.

118. On Page 370, the following is added after line 51:

The unit Contract price per square foot for "Geomembrane" shall be full pay for performing the work as specified, including furnishing and installing the geomembrane material, sealing joints between geomembrane sheets, and installing a boot in each wall blockout.

119. On Page 373, the following is added after line 47:

Section 6-15.3(5) is supplemented with the following:

(******)

Wall 24 Construction Access

No work other than clearing will be allowed above the slope stakes. Construction bench access at or above the top of the cuts will not be allowed. The Contractor is advised that the existing slopes in the vicinity of Wall 24 are steep with difficult access and may require the use of specialized construction methodologies. These methodologies could include but are not limited to small maneuverable equipment, specialized equipment, or crane support for drilling.

120. On Page 374, lines 2 through 14 are revised to read as follows:

Order of Work at Work Bench Soil Nail Walls

The vertical soil nails shall be installed before excavating the first lift in the work bench and soil nail wall construction at the Lake Keechelus Snowshed Repl. and Slide Curve Bridge. Vertical soil nails shall be installed 30 inches on-center along Wall 7 from W7 Sta. 12+02.17 to W7 Sta. 21+51.53 and along the full length of Walls 4, 7A, and 7B. Wall 7 is associated with the AR1 Workbench at Slide Curve Bridge, and Wall 4 is associated with the AR6 Workbench at Lake Keechelus Snowshed Repl. For both of these work benches, each vertical soil nail element shall consist of the specified reinforcing bar and grout placed into a 6-inch diameter hole drilled immediately behind the work bench vertical cut for full

height of the wall to a minimum depth of 2 ft below the heel of the wall. Every twentieth vertical soil nail for Wall 7 from W7 Sta. 16+64.00 to W7 Sta. 19+99.41 shall be used to verify the elevation of bedrock. The verified bedrock elevations shall be reported to the Engineer within 7 calendar days after installing the vertical soil nails for Wall 7.

121. On Page 374, lines 34 through 41 are deleted.

122. On Page 375, lines 21 through 39 are deleted and replaced with the following:

Soil nail verification tests shall be conducted as follows:

Verification Test Limits	Soil Nail Row	Number of Successful Verification Tests Required
***		
Wall # 4		
W4 Sta. 14+25	Top Row	1
W4 Sta. 18+50	Top Row	1
W4 Sta. 22+00	Top Row	1
Wall # 7		
W7 Sta. 15+25	Top Row	1
W7 Sta. 18+25	Top Row	1
Wall # 7A		
W7A Sta. 10+10	Top Row	1
Wall # 7B		
W7B Sta. 10+50	Top Row	1
Wall # 24		
LW Sta. 1349+10	Row 7	1
LW Sta. 1349+45	Row 1	1
LW Sta. 1350+25	Row 1a	1
LW Sta. 1350+90	Row 5	1
***		

(******)
Soil nail verification tests shall be conducted as follows:

Wall # 4
W4 Sta. 14+25 verification test installation shall be bonded into soil only.
W4 Sta. 18+50 verification test installation shall be bonded into soil only.
W4 Sta. 22+00 verification test installation shall be bonded into rock only.

Wall # 7

W7 Sta. 15+25 verification test installation shall be bonded into soil only.
W7 Sta. 18+25 verification test installation shall be bonded into soil only.

Wall # 7A
W7A Sta. 10+10 verification test installation shall be bonded into rock only.

Wall # 7B
W7B Sta. 10+50 verification test installation shall be bonded into rock only.

Wall # 24
LW Sta. 1349+10 verification test installation shall be bonded into rock only.
LW Sta. 1349+45 verification test installation shall be bonded into soil only.
LW Sta. 1350+25 verification test installation shall be bonded into soil only.
LW Sta. 1350+90 verification test installation shall be bonded into rock only.

123. On Page 375, line 46 is deleted.

124. On Page 375, the following is added after line 51:

All costs associated with accessing the Wall 24 construction site shall be included in the unit contract prices for the bid items involved in the construction of Wall 24.

125. On Page 376, the following is added after line 1:

All costs in connection with constructing the concrete fascia panels as specified shall be included in the unit Contract price per square foot for “Concrete Fascia Panel – Soil Nail Walls”, including all steel reinforcing bars, premolded joint filler, polyethylene bond breaker strip, joint sealant, PVC pipe for weep holes, exterior surface finish, and pigmented sealer (when specified).

126. On Page 378, lines 38 through 45 are deleted and replaced with the following:

Testing And Stressing

127. On Page 380, the following is added after line 3:

Performance Testing

The performance test schedule following the second paragraph of Section 6-17.3(8)B is revised to read:

(January 3, 2011)
Performance Test Schedule

Load
AL
0.25FDL
AL
0.25FDL
0.50FDL
AL
0.25FDL
0.50FDL
0.75FDL
AL
0.25FDL
0.50FDL
0.75FDL
1.00FDL
AL
0.25FDL
0.50FDL
0.75FDL
1.00FDL
1.15FDL
AL
Jack to lock-off load

Where: AL - is the alignment load
FDL - is the factored design load.

Proof Testing

The proof test schedule following the first paragraph of Section 6-17.3(8)C is revised to read:

(January 3, 2011)
Proof Test Schedule

Load

AL
0.25FDL
0.50FDL
0.75FDL
1.00FDL
1.15FDL
Jack to lock-off load

Where: AL - is the alignment load

FDL - is the factored design load

128. On Page 380, the following is added after line 33:

(******)

Wall 24 - Coloration for Shotcrete Facing Finishing Alternative C

If shotcrete facing finishing Alternative C is specified, the Contractor shall provide shotcrete coloration for finishing the sculptured shotcrete to match the color of the natural surroundings. Approval of the final appearance of the coloration will be based on the pre-production test panel. Approval of the long-term properties of the coloration material shall be based on a manufacturer's certification which verifies the following to be true about the product:

1. Resistance to alkalis in accordance with ASTM D 543.

2. Demonstrates no change in coloration after 1,000 hours of testing in accordance with ASTM D 822.

3. Does not oxidize when tested in accordance with ASTM D 822.

4. Demonstrates resistance to gasoline and mineral spirits when tested in accordance with ASTM D 543.

Additionally, the certification shall provide the product name, proposed mix design and application method, and evidence of at least one project where the product, using the proposed mix and application method, was applied and which has provided at least five years or more of acceptable durability and color permanency.

Payment

Section 6-18.5 is supplemented with the following:

"Shotcrete Facing _____", per square foot.

All costs in connection with reinforced (permanent) and unreinforced (temporary) shotcrete facing shall be included in the unit contract price per square foot for "Shotcrete Facing _____".

129. On Page 382, lines 40 through 51 are revised to read as follows:

Prior to installing liner pipe and grouting, existing pipes shall be cleaned of all deleterious material. The grout mix shall be batched at the site due to the small quantity and distance away from the nearest batch plant. The grout shall be pumped into the annular space in a way that the grout fills the entire area and no air is left in the annular space. The Contractor shall leave all plugs, caps, and valves in place and closed for at least 24-hours after grouting. The grout mix shall be injected within 30 minutes after the water is added to the cement. Cubes will be made by the Contracting

Agency in accordance with WSDOT Test Method T 813 and stored in accordance with WSDOT FOP for AASHTO T 23. If ambient conditions are such that the surrounding culvert temperature may fall below 35ºF, the Contractor shall provide protective covering for the ends of the culvert being lined. Grout temperature shall not exceed 90ºF during mixing and pumping. If conditions are such that the temperature of the grout mix may exceed 90ºF, the Contractor shall make necessary provisions, such as cooling the mix water and/or dry ingredients, to ensure that the temperature of the grout mix does not exceed 90ºF.

130. On Page 383, the following is added after line 47:

Materials

Section 7-05.2 is supplemented with the following:

(******)

Wire Mesh	9-07

131. On Page 384, the following is added after line 10:

(******)

Concrete Cap

A 6-inch thick concrete cap shall be cast in place on top of the CDF in Drainage Structure D4-10 as shown in the Plans. Concrete for the cap shall be commercial concrete reinforced with 4x4 – W2.0x2.0 welded wire fabric.

132. On Page 384, the following is added after line 16:

Conc. cap will be measured per square foot.

133. On Page 384, the following is added after line 36:

“Conc. Cap”, per square foot.

The unit Contract price per square foot for “Conc. Cap” shall be full pay for performing the work as specified, including all costs in association with furnishing and placing commercial concrete and welded wire fabric.

134. On Page 385, line 42 is revised to read as follows:

Resin bonded anchors [~~Stainless steel/epoxy anchors~~]	14 EA

135. On Page 386, lines 4 through 6 are revised to read as follows:

The lump sum contract price for "Hydrocarbon Sensors" shall be full pay for performing the work as specified, including furnishing and installing all sensors, mounts, brackets, sensor modules, cables, cable junction boxes, and resin bonded anchors [~~stainless steel anchors~~].

136. On Page 386, the following is added after line 30:

6. Resin bonded anchors shall be 316 stainless steel.

137. On Page 387, line 15 is revised to read as follows:

Resin bonded anchors [~~Stainless steel/epoxy anchors~~] 4 EA

138. On Page 387, lines 30 through 33 are revised to read as follows:

The lump sum contract price for "Knife Gate Stormwater Valve" shall be full pay for performing the work as specified, including furnishing and installing the knife gate valve, valve actuator, mounted actuator control module, cables, flange coupling adaptors, junction boxes, fabricated steel platform, and resin bonded anchors [~~stainless steel anchors~~].

139. On Page 390, lines 26 through 34 are deleted and replaced with the following:

1. Plans, details, and materials specifications, for the construction and maintenance of the temporary conveyance channel. This shall include calculations for sizing the diversion, including materials and equipment. At a minimum, the temporary conveyance channel shall have sufficient capacity to maintain the seasonal flow of the stream during the permitted construction window described above without detrimental impacts (including erosion) to upstream or downstream areas of the actual diversion.
2. Reference to any dewatering plan and TESC plan elements associated with the proposed diversion.

140. On Page 398, line 27 is deleted and replaced with the following:

http://www.wsdot.wa.gov/Projects/I90/SnoqualmiePassEast/I90contractorinfo.htm

141. On Page 400, lines 34 through 36 are deleted.

142. On Page 407, lines 33 through 43 are revised to read as follows:

Environmental compliance lead will be measured by the day for performance of duties to assure that environmental compliance is achieved. Days will not be measured for payment, for any day on which the Engineer does not require the ECL to be at the job site performing environmental compliance duties. On-call days are defined as weekend, holiday, and winter shutdown days. On-call days will not be measured for payment unless the Engineer calls the ECL to the job site and the ECL shows up at the job site during that day. A day for an Environmental Compliance Lead will be defined as any 24-hour period for a person to perform on-site inspection as listed in duty No. 8, proactive duty No. 3, and other duties listed above in the **Environmental Compliance Lead** subsection as required to assure that environmental compliance is met. A

minimum bid of $750.00 [~~$340.00~~] a day is required for this bid item in the Contract.

143. On Page 408, the following is added after line 14:

All costs for rental, delivery, and return of wheel wash units, heavy duty metal grates, portable generators as needed, and any other tire wash equipment shall be included in the unit Contract price per each for “Tire Wash”.

Any additional costs associated with installing and accessing the tire wash shall be included in the unit bid cost for “Tire Wash”. This includes, but is not limited to, improvements to auxiliary lanes, ramps, and haul roads.

144. On Page 413, lines 12 through 16 are deleted and replaced with the following:

Within 30 calendar days after contract execution, and before starting any Work that disturbs the earth and as described in Sections 8-01, 8-02 and 8-03, the Contractor shall submit a roadside work plan for approval by the Engineer. The Engineer will require up to 10 calendar days to accept the plan or return it for correction.

145. On Page 415, the following is added after line 36:

(******)
All costs associated with preparing and submitting the roadside work plan shall be included in the unit contract prices for the applicable Bid items from Sections 8-01, 8-02 and 8-03.

146. On Page 422, line 37 is revised to read as follows:

The hardware or fittings shall be aluminum blind rivets. Aluminum blind rivets will be visually accepted by the Engineer.

147. On Page 423, the following is added after line 37:

Description
Section 8-11.1 is supplemented with the following:

(******)
Barrier Gaps
This work also consists of furnishing, installing, repairing, and removing barrier gaps in accordance with the Plans, this Special Provision, and as designated by the Engineer. Barrier Gaps are openings in a line of temporary concrete barrier spanned by installed guardrail units as detailed on Plan Sheets CB5 and CB6.

148. On Page 423, the following is added after line 41:

(******)

Barrier Gaps

Thrie beam guardrail and Design F end sections used in barrier gaps shall be galvanized.

149. On Page 424, the following is added after line 8:

(******)

Barrier Gaps

Barrier gaps shall be constructed as shown in the Plans. Barrier gaps shall be installed during the placement of temporary concrete barrier and removed when temporary concrete barrier is removed. Damaged barrier gaps shall be repaired immediately following an event which damaged the unit. Barrier gaps damaged due to the Contractor's operations shall be repaired at the Contractor's expense.

150. On Page 424, lines 13 through 16 are deleted and replaced with the following:

(******)

Barrier gaps will be measured per each installation as shown in the Plans.

151. On Page 424, the following is added after line 24:

(******)

"Barrier Gaps", per each.

The unit contract price per each for "Barrier Gaps" shall be full pay to furnish, install, repair, and remove the barrier gap as specified.

152. On Page 425, lines 45 through 50 are revised to read as follows:

(******)

Streambed Aggregate

This work shall also consist of furnishing and placing [~~include placement of~~] streambed aggregates of type specified at the locations and in conformity with the lines and dimensions shown in the Plans or established by the Engineer. This work shall include the construction of the Stream Transitions at Resort Creek. All costs in connection with the construction of the Stream Transitions shall be included in the applicable items of work.

153. On Page 426, lines 11 through 14 are revised to read as follows:

Streambed materials will also be available from streambed excavations as shown in the Drainage Profiles. At the discretion of the Engineer [~~When practical~~], components of the excavated streambed materials, which meet the gradation criteria listed above, shall be used to supplement the Streambed Aggregate.

154. On Page 426, lines 23 through 24 are revised to read as follows:

Streambed Aggregate and Riprap materials will be visually accepted by the Engineer in the conveyance vehicle at the point of delivery.

155. On Page 428, lines 13 through 20 are deleted and replaced with the following:

(******)

Stockpiling Aggregate

Streambed Boulders shall be delivered into stockpiles so that each size classification is sorted and placed into its own stockpile.

For Resort Creek, Streambed Sediment and Streambed Cobble gradings shall be placed in separate stockpiles.

For Upper Resort Creek, Streambed Sediment and Streambed Cobbles shall be blended into a single stockpile, with the exception that the additional Streambed Sediment and Streambed Cobbles required in the text below shall be placed in separate stockpiles.

(******)

Placing Aggregate in the Streambed

Resort Creek

At Resort Creek, the Contractor shall place the Streambed Sediment and Streambed Cobbles in alternating lifts with dimensions as shown in typical sections in the Plans. Final installation shall provide a well graded mix of Streambed Sediment and Streambed Cobbles. See Special Provision **HABITAT STRUCTURES** for placement of Streambed Boulders at Resort Creek.

Upper Resort Creek

At Upper Resort Creek, the Contractor shall place the Streambed Aggregate in layers no deeper than 24-inches. Boulders that exceed 24-inches may protrude beyond the layer. The Contractor shall separate and evenly distribute the One Man and Two Man Streambed Boulders and fill the interstitial voids with Streambed Sediment and Streambed Cobbles. The Contractor shall use water to facilitate filling the Streambed Sediment and Streambed Cobbles into the interstitial voids of the boulders.

Placing Streambed Boulders for Channel Roughening at Upper Resort Creek

At Upper Resort Creek, the Contractor shall install Three Man and Four Man Streambed Boulders with approximately 10-foot spacing throughout the graded section as shown in the Plans. Exact location and orientation of these Streambed Boulders are to be determined on site by the Engineer. Boulders shall be countersunk into Streambed Aggregate to 50% of boulder diameter.

156. On Page 428, lines 22 through 27 are revised to read as follows:

Placing Additional Sediment and Cobbles in Streambed at Resort Creek and Upper Resort Creek

Placement of additional Streambed Sediment and Streambed Cobbles will be constructed to ensure that low stream flows are conveyed above the final channel grade. An indicator that the voids are satisfactorily filled with Streambed Sediment and Cobbles is when the water flows on the surface of the Streambed Aggregate and does not migrate (disappear) sub-surface.

157. On Page 428, line 40 is deleted and replaced with the following:

One man streambed boulders will be measured per ton.

Two man, three man, and four man streambed boulders will be measured per each.

158. On Page 429, line 9 is deleted and replaced with the following:

The unit contract price per ton for “Streambed Sediment” and “Streambed Cobbles” shall be full pay for supplying, installing, and compacting streambed sediment, streambed cobbles, and the additional streambed sediment and cobbles including all labor, materials, equipment, and handwork required to perform the work as specified.

“One Man Streambed Boulders”, per ton.

“Two Man Streambed Boulders”, per each.

“Three Man Streambed Boulders”, per each.

“Four Man Streambed Boulders”, per each.

159. On Page 473, lines 5 through 9 are revised to read as follows:

“Variable Message Sign – Snowshed” [~~“Variable Message Sign”~~], per each.

The unit Contract price per each for “Variable Message Sign – Snowshed” [~~“Variable Message Sign”~~] shall be full compensation for all costs associated with furnishing a variable message sign, controller, communication cables, and connection hardware not shown in the Plans.

160. Page 484, line 46 through Page 485, line 2 is revised to read as follows:

If synthetic slurry is used, either a manufacturer's representative or a Contractor’s employee trained in the use of the synthetic slurry, as approved by the Engineer in accordance with the **Submittals** subsection of this Special Provision, shall provide technical assistance for the use of the synthetic slurry, shall be at the site prior to introduction of the synthetic slurry into the first drilled hole requiring slurry [~~a drilled hole~~], and shall

remain at the site during the construction of the first shaft excavated [~~and completion of a minimum of one shaft~~] to adjust the slurry mix to the specific site conditions.

161. On Page 485, the following is added after line 37:

When synthetic slurry is used, the Contractor shall keep a written record of all additives and concentrations of the additives in the synthetic slurry. These records shall be provided to the Engineer once the slurry system has been established in the first drilled shaft on the project. The Contractor shall provide revised data to the Engineer if changes are made to the type or concentration of additives during construction.

162. On Page 486, lines 24 through 37 are revised to read as follows:

The Contractor shall dispose of the slurry and slurry-contacted spoils as specified in the shaft installation plan as approved by the Engineer, and in accordance with the following requirements:

1. Water slurry with no additives may be infiltrated to uplands within the confines of the Contracting Agency Right Of Way for the project, provided that the groundline at the disposal site is at least five feet above the current water table, and that disposal operations conform to the temporary erosion and sedimentation control (TESC) requirements established for this project. For the purposes of water slurry disposal, upland is defined as an area that has no chance of discharging directly to waters of the State, including wetlands or conveyances that indirectly lead to wetlands or waters of the State.

   Spoils in contact with the slurry may be disposed of as clean fill.

163. On Page 486, lines 39 through 41 are deleted and replaced with the following:

2. Synthetic slurry and water slurry with polymer-based additives shall be contained and disposed of by the Contractor at an approved facility. Spoils in contact with synthetic slurry or water slurry with polymer-based additives shall be contained and disposed of by the Contractor at an approved waste facility. Prior to beginning shaft excavation operations, the Contractor shall coordinate with the waste facility operator and the Jurisdictional Health Department (JHD) to determine requirements for shaft spoils disposal at the facility. The Contractor shall submit the location of the waste facility requirements for disposal of shaft spoils (as approved by the waste facility operator and the JHD), copies of any permits required and obtained, and any associated test results to the Engineer prior to disposal. The Contractor shall stockpile spoils on 6-mil plastic and cover with 6-mil plastic to protect from runoff until approval from the waste facility operator.

164. Page 486, line 49 through Page 487, line 5 is revised to read as follows:

The reinforcement shall be carefully positioned and securely fastened to provide the minimum clearances listed below, and to ensure that no displacement of the steel reinforcing bars occurs during placement of the concrete. The Contractor shall submit details of the proposed reinforcing cage centralizers along with the shop drawings required by item 6 of the shaft installation narrative. The reinforcing steel centralizers [~~spacers~~] shall be placed at least at the quarter points around the circumference of the steel reinforcing bar cage, and located vertically at least at the 1/4 and 3/4 points of the shaft length below the shaft cap.

165. On Page 487, lines 35 through 40 are revised to read as follows:

If water is not present, the concrete shall be deposited through the center of the reinforcement cage by a method which prevents segregation of aggregates and splashing of concrete on the reinforcement cage. The concrete shall be placed such that the free-fall is vertical down the center of the shaft without hitting the sides, the steel reinforcing bars, or the steel reinforcing bar cage bracing. The Section 6-02.3(6) restriction for 5'-0" maximum free-fall shall not apply to placement of Class 4000P concrete into a shaft.

166. Page 501, line 1 through Page 502, line 4 is deleted.

167. On Page 503, lines 1 through 4 are revised to read as follows:

Remove and reset [~~Removing and resetting~~] paddle glare screen will be measured by the linear foot and will be measured 1 time only for removing, storage, and resetting of existing paddle glare screen and paddle glare screen previously installed by the Contractor. No measure will be made for glare screen that has been removed and reset for the convenience of the Contractor.

168. On Page 506, line 26 is deleted and replaced with the following:

http://www.wsdot.wa.gov/Projects/I90/SnoqualmiePassEast/I90contractorinfo.htm

169. On Page 509, lines 21 through 25 are revised to read as follows:

Prior to installing Snow Nets, the Contractor shall remove and dispose all [~~unwanted~~] trees or snags which pose a threat to the Snow Nets, as designated by the Engineer, in accordance with Special Provision **CLEARING, GRUBBING, AND ROADSIDE CLEANUP**. [~~Removal and disposal of trees and snags from the vicinity of the Snow Nets shall be included in the unit contract price for "Upslope Tree Removal".~~]

170. On Page 523, lines 18 through 26 are revised to read as follows:

Ten (10) different sensors and measurements are planned at the ADAS Base Station for the purpose of obtaining real-time meteorological data, snow properties and site conditions. A schematic layout of the mast with the instruments is shown in Detail J on Plan Sheet SM4. The instruments to be installed are listed in the table [~~in Table 2~~] on Plan Sheet SM4. The sensors and instrumentation were selected based on current hardware utilized and maintained by the WSDOT Avalanche Forecasting Group at other established observation sites. No substitutes for the listed instruments and software will be allowed without the approval and express written permission by the Engineer and the Avalanche Group at Hyak.

171. On Page 524, lines 21 through 25 are revised to read as follows:

Tree removal may be required to provide a 40-foot clearing for the solar panel and [~~similarly clearing for the~~] snow pillows. Any tree that poses a threat to the proposed monitoring installation will require removal as designated by the Engineer. [~~Removal of trees in the vicinity of the proposed monitoring installation shall be included in the unit contract price for "Upslope Tree Removal".~~]

172. On Page 525, lines 18 through 25 are revised to read as follows:

This work shall consist of furnishing, assembling and utilizing [~~two~~] rockfall containment nets. After completion of the work, the [~~both~~] rockfall containment nets shall [~~will~~] remain the property of and be delivered to the Contracting Agency at the specified location. The rockfall containment nets shall be used for work on rock slopes during clearing and grubbing, mucking, scaling, rock excavation, Snow Net installation, and slope stabilization activities at the locations shown in the Plans or where otherwise designated by the Engineer. As part of this work [~~bid item~~], the Contractor is also responsible for providing a spreader bar and the equipment to suspend each [~~the~~] rockfall containment net.

173. On Page 525, line 32 is revised to read as follows:

Grid and Perimeter Rope [~~Border Rope~~]: no smaller than 5/16 inch diameter

174. On Page 525, lines 35 through 40 are deleted and replaced with the following:

Cable nets shall be fabricated with a perimeter rope. Interior wire rope junctions shall be bound with either double knots of 1/8 inch diameter corrosion resistant wire, or high-strength, corrosion resistant clips with slotted bottoms made from 0.08 inch (2 mm) thick plate. All perimeter-interior wire rope junctions shall be bound with corrosion resistant ferrules. Clips and ferrules shall be pressed on and tie wires knotted so as not to slip when manually stretched or during the placement of the nets. Clips and ferrules shall be secured in the manner intended by the manufacturer while not damaging the wire ropes. Cable net assemblies showing signs of slight damage as determined by the Engineer will be subject to rejection.

175. On Page 525, lines 42 through 46 are revised to read as follows:

All wire rope shall be galvanized conforming to the requirements of ASTM A 603 Class A. [~~The ¾ inch nominal wire rope shall be of independent wire rope class (IWRC) construction 6x19 and have a normal breaking strength of 52,900 pounds.~~] The 5/16 inch nominal wire rope shall be of galvanized aircraft cable (GAC) construction 7x7 (or 7x19) having a normal breaking strength of 9,200 pounds.

176. On Page 526, lines 1 through 2 are revised to read as follows:

Hardware shall meet the requirements of Section 9-16.4(4) with the revision of being sized for 5/16 inch [~~¾ inch~~] diameter wire rope instead of ½ inch diameter wire rope.

177. On Page 526, lines 7 through 9 are revised to read as follows:

Each [~~The~~] rockfall containment net shall consist of eighteen wire rope panels fastened together and maintained as specified in the Rock Containment Plans. Prior to use, the Contractor shall back the cable net panels with wire mesh secured with high-tensile-steel fasteners on 24-inch O.C. spacing.

178. On Page 526, lines 40 through 46 are revised to read as follows:

After completion of the work, the Contractor shall disassemble each rockfall containment net into individual panels and remove the wire mesh backing. The wire mesh backing and seaming ropes shall become the property of the Contractor and be removed from the job site at the Contractor's expense. The rockfall containment nets shall be delivered in full working order to the Contracting Agency with necessary repairs or replacement of components completed to the Engineer's satisfaction [~~except that no wire mesh backing is to be included with the rockfall containment nets~~]. The repair and/or replacement of the cable net panels shall be paid for by the Contractor. The [~~Both~~] rockfall containment nets shall be [~~must be~~] disassembled into individual panels and components and delivered to the following location:

179. Page 526, line 48 through Page 527, line 6 is deleted and replaced with the following:

WSDOT Area 2 Maintenance & Operations
900 East Selah Rd.
Yakima, WA 98901
Phone: (509) 577-1920

Contact Person:
Les Turnley
Area 2 Maintenance Superintendent

180. On Page 527, lines 8 through 9 are revised to read as follows:

The Contractor shall notify the Engineer and Contact Person a minimum of 72 hours [~~24 hours~~] before delivering the rockfall containment nets.

181. On Page 527, lines 12 through 22 are deleted and replaced with the following:

Not less than two weeks prior to beginning work, the Contractor shall submit in writing to the Engineer for approval:

1. Identification of the supplier of the cable nets. The cable net supplier shall either be listed in the WSDOT Qualified Products List (QPL) or the WSDOT New Products List, or if not listed in the WSDOT QPL or WSDOT New Products List, the submittal shall include written documentation demonstrating satisfactory performance of cable nets furnished by this supplier in projects completed for other agencies in similar site conditions.

2. Mill certificates for the wire rope.

3. The equipment and methods used to support the rockfall containment net.

182. On Page 527, lines 33 through 43 are deleted and replaced with the following:

The lump sum contract price for “Rockfall Containment Net” shall be full pay for furnishing and assembling the Rockfall Containment Nets, backing the cable net panels with wire mesh, providing a spreader bar to suspend each net, and disassembling and delivering the nets to the Contracting Agency.

All costs associated with providing, mobilizing, and operating a crane or other suitable equipment for suspending the Rockfall Containment Nets, and providing all other required materials and labor for suspending the nets, shall be included in the unit contract prices for the various bid items involved in rock slope excavation, clearing and grubbing, mucking, scaling, Snow Net installation, and slope stabilization activities.

183. On Page 527, lines 45 through 47 are revised to read as follows:

All costs associated with repairing the Rockfall Containment Nets [~~Net~~] shall be included in the unit contract prices for “Roadway Excavation Incl. Haul - Area _____” and “Controlled Blasting of Rock Face”.

184. On Page 528, lines 26 through 37 are deleted and replaced with the following:

WSDOT Area 2 Maintenance & Operations
900 East Selah Rd.
Yakima, WA 98901

Phone: (509) 577-1920

Contact Person:
Les Turnley
Area 2 Maintenance Superintendent

185. On Page 529, lines 1 through 3 are deleted and replaced with the following:

2809 Rudkin Road
Union Gap, WA 98903
(509) 577-1840

186. On Page 529, lines 38 through 44 are revised to read as follows:

The Contractor shall design the controlled blasting such that it shall not impact the MRBs, and shall avoid pushing against the MRBs during mucking operations. Damaged [~~The~~] MRBs shall be repaired within 24 hours and prior to additional blasting in the area of the damaged MRBs [~~before further work whenever they become damaged~~]. The Contractor shall bear the burden and cost for any delay resulting from MRB repair. All costs associated with repairing the Movable Rockfall Barrier (WSDOT Owned), except for the initial repair costs for the first installation, shall be included in the unit bid costs for "Roadway Excavation Incl. Haul - Area _____" and "Controlled Blasting of Rock Face".

187. In Appendix A, on Page 3, lines 9 through 10 are revised to read as follows:

The Contractor shall perform Contracting Agency personnel training subsequent to the Engineer's final approval of the Operation and Maintenance Manual and commissioning of special construction.

188. In Appendix A, on Page 3, lines 18 through 25 are revised to read as follows:

The Contractor shall compile and develop a complete multivolume operation and maintenance manual covering all installed equipment. The material for each volume shall be assembled to form books with heavy plastic covers. Each book shall be an approximately 9-inch by 12-inch, three-ring binder with 3-inch "D" rings, and vinyl cover to allow title sheet inserts. [~~Each book shall be neatly entitled with a descriptive title, the name "Lake Keechelus Snowshed Repl.", the volume and book number, the name of the Contracting Agency, the contract number, date of installation, and the name of the Contractor.~~] The following information shall be placed in the title page of each book:

189. In Appendix A, on Page 3, the following is added after line 44:

All drawings shall be as follows:

1. All drawings shall be originals. No photocopies will be permitted.

2. All catalog cuts shall be identified with part identifiers, contract number, and complete manufacturer's part number, with pertinent information highlighted and non-pertinent information crossed out.

3. All drawings showing equipment assemblies shall be documented with part identifiers.

4. All drawings shall be provided both as working CADD files and in PDF format on DVD. The DVD shall have these electronic files placed appropriately in folders.

190. In Appendix A, on Page 4, lines 7 through 29 are deleted.

191. In Appendix A, on Page 5, the following is added after line 51:

3. Licensed copy on DVD of all software required to modify the Lighting Control Equipment Program.

192. In Appendix A, on Page 6, the following is added after line 33:

3. Licensed copy on DVD of all software required to modify the Fire Alarm System Program.

193. In Appendix A, on Page 7, lines 27 through 28 are revised to read as follows:

Final approval of the Operation and Maintenance Manual shall be obtained by the Contractor prior to <u>commissioning of special construction and training of Contracting Agency personnel</u>. [~~final acceptance testing of the Lake Keechelus Snowshed Repl.~~]

194. In Appendix A, on Page 7, lines 31 through 40 are revised to read as follows:

The Contractor shall provide training services for the Contracting Agency's Lake Keechelus Snowshed Repl. operators, maintenance personnel, and local fire fighters. The Contractor shall coordinate a training date <u>sometime between April 15th and October 15th</u> that works for all groups. The Contractor shall submit a minimum of two weeks (14 days) prior to the schedule date for the first day of the instruction training session, a complete training syllabus outlining topics to be covered, timeframes and training location for said topics and materials to be furnished as part of the training sessions. The training sessions shall be organized and be administered to a multi-disciplined group. Training sessions shall be devoted to theory of operation, maintenance, and trouble shooting of the new mechanical, electrical control and power distribution, fire/life safety, and communication systems.

195. In Appendix A, on Page 8, lines 7 through 24 are revised to read as follows:

Maintenance Personnel Training

The Contractor shall provide training at the Lake Keechelus Snowshed Repl. and in the classroom for [~~on-site and off-site training of~~] the Contracting Agency's electricians, maintenance workers, and other personnel as indicated by the Contracting Agency on subjects such as maintenance, adjustment, troubleshooting, programming, and repair of all equipment furnished and installed by the Contractor under this Contract at the Lake Keechelus Snowshed Repl. The Contractor shall submit to the Engineer for approval, a detailed outline of topics to be covered and training material for review. The outline of topics shall consist of a schedule of training based upon a detailed list of topics, including start and finish times for each topic each day.

Fire/Life Safety Training

The Contractor shall provide fire/life safety trainers to train Contracting Agency personnel and local fire fighters [~~at the Lake Keechelus Snowshed Repl. in the use and maintenance of the fire/life safety systems including the fire alarm system program~~]. One session shall be provided for each assembled group at the Lake Keechelus Snowshed Repl. in the use and maintenance of the fire/life safety systems including the fire alarm control panel and the fire alarm system program, and one session shall be provided for the Contracting Agency TOC (Traffic Operation Center) and TMC (Traffic Management Center) personnel at the Hyak TOC on the use and operation of the remote fire alarm control panel at that location. The trainers shall be skilled persons competent with the vaults and fans, and completely familiar with using, maintaining, and programming the fire alarm system program.

196. In Appendix A, on Page 8, lines 33 through 36 are revised to read as follows:

Training shall not commence until the Lake Keechelus Snowshed Repl. is operational and the associated systems have been accepted by the Engineer. See Section 130800 Commissioning of Special Construction [~~and Section 230800 Commissioning of Life Safety Systems and Equipment~~].

197. In Appendix A, on Page 8, lines 38 through 42 are revised to read as follows:

As-Built Documentation

After completion of all work, the Contractor shall obtain from the Engineer a new set of prints and shall mark the prints to show all departures from the Contract Plans. The Contractor shall indicate exact circuiting and wire numbers, including exact fiber optic cabling. The Contractor shall make the markings with red indelible pen and shall deliver these prints to the Engineer.

198. In Appendix A, on Page 9, lines 21 through 23 are revised to read as follows:

3. Installation drawings giving locations of all cables, fiber optic cables and splices, conduits, roadway signals, service equipment, control panels, CCTV equipment, and all other apparatus.

199. In Appendix A, on Page 9, lines 40 through 44 are revised to read as follows:

The marked up prints shall be submitted to the Engineer for approval. Once the marked up prints are approved by the Engineer, the Contractor shall incorporate any comments and marked up prints into a final CADD set. The Contractor shall submit a complete set of printed drawings, and PDF and working CADD files on DVD for all as-built drawings [~~and an electronic copy of all drawings on DVD for all as-built drawings~~]. The As-Built Documentation DVD shall have the electronic files placed appropriately in folders.

200. In Appendix A, on Page 9, the following is added after line 45:

The cover of the as-built drawings DVD shall have the following information:

As-Built Documentation
Lake Keechelus Snowshed Repl.
Bridge No. 90/110N Repl.
Built under Contract No. _____
Date of Preparation
Contractor

201. In Appendix A, on Page 41, lines 29 through 30 are revised to read as follows:

The Contractor shall submit the manufacturer's written installation instructions indicating the criteria for preparation and installation.

202. In Appendix A, on Page 78, the following is added after line 29:

This plan shall be prepared and submitted to the Engineer for review and approval at least two weeks before the commissioning testing process is scheduled to begin.

203. In Appendix A, on Page 78, line 42 is revised to read as follows:

The Contractor shall attend construction phase controls coordination meetings [~~meeting~~].

204. In Appendix A, on Page 78, lines 44 through 45 are revised to read as follows:

The Contractor shall attend testing, adjusting, and balancing review and coordination meetings [~~meeting~~].

205. In Appendix A, on Page 79, the following is added after line 8:

The Contractor is responsible for reading / recording all measured test data information from the testing and providing it to the Engineer for inclusion with the final commissioning documentation.

206. In Appendix A, on Page 80, lines 43 through 44 are revised to read as follows:

The Contractor shall provide technicians, instrumentation, ladders, and tools to perform commissioning tests [~~test~~] at the direction of the Engineer.

207. In Appendix A, on Page 81, lines 2 through 3 are revised to read as follows:

The Contractor shall perform tests [~~tests shall be performed~~] using design conditions whenever possible.

208. In Appendix A, on Page 81, lines 5 through 11 are revised to read as follows:

Simulated conditions [~~The Contractor shall simulated conditions~~] may need to be imposed using an artificial load when it is not practical to test under design conditions. Before simulating conditions, the Contractor shall calibrate testing instruments. The Contractor shall provide equipment to simulate loads. The Contractor shall set simulated conditions as directed by the Engineer and document simulated conditions and methods of simulation. After tests, the Contractor shall return settings to normal operating conditions.

209. In Appendix A, on Page 81, lines 23 through 24 are deleted and replaced with the following:

If the testing plan indicates specific seasonal testing, the Contractor shall first complete all appropriate initial performance tests and documentation, and then schedule the specific seasonal tests to take place during the appropriate time of the year.

210. In Appendix A, on Page 81, lines 27 through 33 are revised to read as follows:

The Contractor shall operate all equipment and systems as required to repeat all necessary testing procedures identified in the Technical Provisions to allow the Engineer or designated commissioning agent to document the testing process. The following is an abbreviated list of required tests, and is not intended [~~included~~] to be complete. Commissioning shall include all tests necessary to demonstrate completeness and functionality of each piece of equipment and each system. See each individual Section requirements for additional testing requirements.

211. In Appendix A, on Page 216, lines 26 to 29 are deleted and replaced with the following:

7. A protective device coordination study shall be performed to provide the necessary calculations and logic decisions required to select or to

check the selection of power fuse ratings, protective relay characteristics and settings, ratios and characteristics of associated current transformers, and low voltage breaker trip characteristics and settings. The objective of the study is to obtain optimum protective and coordination performance from these devices.

a. The coordination study shall include all voltage classes of equipment from the utility company's medium voltage incoming line protective device down to and including the largest rated device in each switchboard or panelboard. The phase and ground overcurrent protection shall be included as well as settings of all other adjustable protective devices.

b. The time-current characteristics of the specified protective devices shall be drawn on log-log paper. The plots shall include complete titles, representative one-line diagram and legends, associated power company's relays or fuse characteristics, significant motor starting characteristics, complete parameters of transformers, complete operating bands of low voltage circuit breaker trip curves and fuses. The coordination plots shall indicate the types of protective devices selected, proposed relay taps, time dial and instantaneous trip settings, transformer magnetizing inrush and ANSI transformer withstand parameters, cable thermal overcurrent withstand limits and significant symmetrical and asymmetrical fault currents. All restrictions of the National Electrical Code shall be adhered to and proper coordination intervals and separation of characteristic curves shall be maintained. The coordination plots for phase and ground protective devices shall be provided on a system basis. A sufficient number of separate curves shall be used to clearly indicate the coordination achieved.

c. The selection and settings of the protective devices shall be provided separately in a tabulated form listing circuit identification, current transformer ratios and connection, manufacturer and types, range of adjustment and recommended settings. A tabulation of the recommended power fuse selection shall be provided for all fuses in the system. Any discrepancies, problem areas, or inadequacies shall be promptly brought to WSDOT's attention.

212. In Appendix A, on Page 216, the following is added after line 42:

ARC flash study and labels:

a. The Contractor shall require the 480V switchboard and panelboard suppliers to label or mark the equipment in compliance with OSHA requirements as to the Hazard

Classification, risk zones (distances) and rated calories of protection required to operate and inspect the equipment.

b. Calculations and assumptions supporting these conclusions are to be included in the power system study report. OCPD settings used for Arc Flash Hazard study are to be the same as the recommended settings for the coordination study.

The results of the power system study shall be summarized in a final report. Three (3) bound copies of the final report shall be submitted. The report shall include the following sections:

a. Description, purpose, basis and scope of the study and a single diagram of that portion of the power system which is included within the scope of the study.

b. Tabulations of circuit breaker, fuse and other protective device ratings.

c. Protective device time versus current coordination curves, tabulations of relay and circuit breaker trip settings, fuse selection, and commentary regarding same.

The equipment manufacturer shall provide the services of a qualified field engineer and necessary tools and equipment to test, calibrate, and adjust the protective relays and circuit breaker trip devices as recommended in the power system study.

213. In Appendix A, on Page 263, lines 30 through 31 are revised to read as follows:

Optical fiber cables shall be multimode, 62.5/125-micrometer, [~~24-fiber,~~] nonconductive, tight buffer, optical fiber cable. Quantity of fibers shall be as shown on the drawings.

214. In Appendix A, on Page 276, lines 10 through 12 are revised to read as follows:

2. Identify alarm at the main Fire Alarm Control Panel (FACP), two Smoke Control Panels (SCP), Hyak Command Center TOC FACP, Yakima TMC [~~TCM~~] FACP, and the control panels separate graphic display units. See Plans for further information.

215. In Appendix A, on Page 276, line 41 is revised to read as follows:

Fire Alarm Control Panels (FACP) [~~and Smoke Control Panels (SCP)~~]

216. In Appendix A, on Page 277, lines 9 through 10 are revised to read as follows:

All FACP [~~and SCP~~] shall include the following hardware and programming unless otherwise noted.

217. In Appendix A, on Page 277, line 16 through 17 are revised to read as follows:

Fire alarm control panel [~~panels and smoke control panels~~] computer parameters shall conform to the following:

218. In Appendix A, on Page 277, line 40 through 47 are revised to read as follows:

8. Snowshed visually and audibly annunciate any trouble, supervisory and alarm condition on all graphic displays, panel displays, and annunciators. Each of the fire alarm control panels located within the Snowshed, Hyak command center and Yakima command center [~~and Snowshed SCP~~] shall have a separate graphic display located next to the respective control panel. All of the graphic display screens shall be coordinated with the Contracting Agency prior to submittal of each graphic display configuration through the project's submittal process.

219. In Appendix A, on Page 278, lines 5 through 10 are revised to read as follows:

2. The three FACPs (main FACP, Hyak TOC FACP and Yakima TMC FACP) [~~along with the two SCP (Snowshed smoke control panels)~~] shall include full featured operator interface control and annunciation panels that shall include a backlit, 80 character liquid crystal display, individual, color coded system status LEDs, and an alphanumeric keypad for field programming and control of fire alarm system.

220. In Appendix A, on Page 278, lines 12 through 13 are revised to read as follows:

3. The three FACPs (main FACP, Hyak TOC FACP and Yakima TMC FACP) [~~and two smoke control panels (SCPs)~~] shall include the following features:

221. In Appendix A, on Page 279, lines 50 through 52 are revised to read as follows:

The FACPs [~~and SCPs~~] shall include all required hardware, software and system programming to provide a complete and operational system. The FACPs [~~and SCPs~~] shall assure that life safety takes precedence among all panel activities.

222. In Appendix A, on Page 280, lines 2 through 3 are revised to read as follows:

The FACP panels [~~and SCP panels~~] shall include the ability to fully communicate with all other associated FACP panels [~~and Smoke Control Panel (SCP)~~] identified in the Plans.

223. In Appendix A, on Page 280, the following is added after line 4:

Smoke Control Panel (SCP)

One smoke control panel (SCP) shall be located at each entrance of the Snowshed. The panel shall be housed in a custom flush-mounted stainless

steel outdoor enclosure (see Drawings). The panel shall provide a user-friendly interface to the HVAC system for use in smoke control.

The SCP shall include the following hardware and parameters unless otherwise noted:

1. Map of Snowshed. Map shall include all rooms indicated in the Plans.

2. LED indicating alarm condition for every room. LED indicating status conditions of axial exhaust fans (AEF) and fire dampers. LED shall have a minimum operating life of 170,000 hours of continuous or pulsed operation. Illumination of any LED indicator shall be clearly visible from any viewing angle in front of the working surface of the panel. A pushbutton shall be provided for simultaneous testing of all LEDs.

3. Switches for axial exhaust fan controls. Each AEF fan shall be provide with a four-position switch (Half Speed, Full Speed, AUTO, OFF).

4. LCD annunciator (2 lines 40 characters) with LED backlighting. Annunciator shall provide system controls for alarm acknowledgement, silence, and reset.

5. Listed to UL Standard 864.

6. Drivers required to be communicated and connected to FACP. Drivers shall be installed indoors in separate NEMA 1 enclosure. See Plans.

224. In Appendix A, on Page 284, the following is added after line 19:

Fiber Optic Linear Heat Detection System
Linear heat detection shall be installed underneath concrete girders in the Snowshed (see Plans).

Sensor cable shall measure surrounding temperature by means of optical fibers. Each sensor cable shall have UL approved sensor spacing of at least 30 feet with minimum operating temperature ranging from -40°F to 185°F. One single sensor cable's range shall be at a minimum 6,000 feet. Sensor cable shall consist of two independent fibers encased in a Halogen free, flame retardant jacket.

The fiber optic linear heat detection system shall include a Temperature Sensor (TS) Controller for monitor and control. The TS Controller shall include the following hardware unless otherwise noted:

1. Power supply – 120 VAC.

2. Ambient temperature: 32°F to 104°F.

3. RS232 interface.

4. 4 programmable inputs.

5. 10 programmable outputs.

6. Ethernet interface, TCP/IP

7. Remote software interface

8. LED status indicator for the following:

    a. Power ON

    b. Laser ON

    c. Fault/Trouble

    d. Ethernet connected

    e. RS232 connected

    f. Alarm (fire detected)

    g. Pre-Alarm

9. NEMA 3R Enclosure sized for TS Controller and accessories.

    The TS Controller and fiber optic sensor cable shall have the following feature and functionality unless otherwise noted:

    a. Temperature sensing by one of the following technologies:

        1) Optical Time-Domain Reflectometry (OTDR)

        2) Optical Frequency-Domain Reflectometry (OFDR)

    b. 8 total Snowshed fire zones (4 for eastbound direction, and 4 for westbound direction). The 8 zones shall be equally spaced throughout the length of the Snowshed.

    c. Alarm initiation by temperature difference between a measured location and the zone average temperature. The sensor cable and TS Controller shall be programmed to initiate alarm condition to the main FACP when a temperature differential of 80°F is detected. The TS Controller shall initiate a pre-alarm condition to Hyak TOC

and Yakima TMC when a temperature differential of 20°F is detected from the sensor cable.

d. Closed loop (Class A) connection. Controller shall be able to perform measurements from both ends of fiber. Should a break occur in the fiber, the entire sensor cable shall continue to be monitored up to the point of break.

e. Controller shall be able to monitor 2 fiber optic sensor cables simultaneously.

f. Alarm reset via TS Controller and/or software program at remote computer.

The fiber optic linear heat detection system shall include a remote software program that will communicate directly with TS Controller. This software program shall be isolated from the Fire Alarm Control Panel (FACP). The software shall be installed onto a standard computer at Hyak TOC and Yakima TMC. Through the software program, the operator shall be able to perform the following tasks:

a. Determine fire location, temperature, and size.

b. Determine direction to which fire is spreading.

c. Display temperature for all fire zones.

d. Remote programming of TS Controller.

e. Alert operator of a break in the fiber strand in the sensor cable.

f. Data logging of events over 1 year period.

The fiber optic sensor cable shall be mounted to the roof girders as shown in the Plans. Supporting cable shall be 5/16 inch stainless steel cable that shall be attached at each end and supported with eye bolts attached to the bottom of each roof girder (see structural plans for eye bolt and tensioning bracket details and attachment method). Supporting cable ends shall be attached to tensioning brackets at each end with stainless steel turnbuckles, stainless steel cable thimbles and secured with copper oval sleeves, then tensioned to 200 pounds after mounting. Fiber optic sensor cable shall be attached to the support cable using HPC-2 spring clips every five feet along the entire supported length of the cable.

225. In Appendix M, the LOG OF TEST BORING for each of the following Hole No.'s is added:

Plans

1. Plan sheets 2 through 17, 19 through 28, 31 through 43, 46, 177 through 181, 193, 194, 197, 202, 203, 237, 240, 243, 260, 261, 264 through 266, 268, 279, 280, 284, 293, 294, 302, 366 through 369, 374, 376, 378, 388 through 395, 493, 502, 505, 506, 522, 523, 526, 550 through 555, 557, 558, 561, 563, 565 through 570, 572, 573, 575 through 580, 585, 586, 607 through 612, 663, 665 through 667, 669, 679, 680, 683 through 686, 735 through 738, 927 through 932, 934, 939, 943 through 950, 961, 962, 1047, 1064, 1065, 1070 through 1072, 1082, 1087, 1088, 1090 through 1092, 1107 through 1112, 1114, 1117 through 1122, 1125, 1126, 1128 through 1132, 1135 through 1140, 1151 through 1153, 1158 through 1160, 1173, 1174, 1177, 1179, 1182, 1188, 1189, 1239, 1240, 1242, 1244 through 1247, 1253, 1256, 1263 through 1265, 1268, 1269, 1272, 1273, 1277 through 1279, 1283, 1285, 1286, 1288, 1289, 1291, 1292, 1295 through 1300, 1302 through 1304, 1311, 1313, 1316 through 1321, 1323 through 1331, 1335 through 1343, 1347 through 1352, 1354 through 1356, 1358, 1359, 1362 through 1369, 1374, 1375, 1377 through 1382, 1386, 1390, 1391, 1394, 1396, 1399, 1401 through 1416, 1425, 1426, 1429 through 1433, 1437, 1439 through 1442, 1445 through 1449, 1452 through 1456, 1461, 1462, 1463, and 1490 are revised as shaded, outlined and noted on the attached sheets.

2. Plan sheets 272, 282, 283, 382, 383 through 386, 387, 492, 525, 556, 560, 562, 571, 672 through 676, 1066, 1067 through 1069, 1073, 1096, 1097, 1143, 1145, 1148 through 1150, 1155 through 1157, 1223, 1251, 1252, 1254, 1260 through 1262, 1474, 1484, are replaced with the attached sheets.

3. Plan sheets 175A, 175B, 275A through 275K, 386A, 395A, 395B, 696A through 696R, 1066A, 1144A, 1146A, 1223A, 1424A and 1461A are added to the Plans.

4. On plan sheet 756, in DETAIL 1, BA39 is deleted and replaced with BA40.

5. On plan sheets 796, 797, 799 and 801, all references to the BE plan sheet series are deleted and replaced with reference to the BA plan sheet series.

6. On plan sheet 808, in the ELEVATION – CONDUITS & J-BOX IN TRAFFIC BARRIER Detail, the reference to Standard Plan J-11a is deleted and replaced with Standard Plan J-40.36-00.

7. On plan sheet 839, in the ELEVATION – CONDUITS & J-BOX IN TRAFFIC BARRIER Detail, the reference to STANDARD PLAN J-16a is deleted and replaced with STANDARD PLAN J-40.30-01.

8. Plan sheets with the words “In Progress” shown in the Checked By box now have the information checked and the Checked By box has been filled in with the checkers initials and date. No other revisions have been made to these sheets, these sheets are available for review at the Project Engineer’s office.

Proposal

1. On Page 1:

   Item No. 2, the PLAN QUANTITY is revised.
   Item No. 7, the TOTAL AMOUNT DOLLARS is revised.
   Item No. 9 is deleted.

2. On Page 2: Item No. 18 is deleted.

3. On Page 3: Item No.'s 24 and 33, the PLAN QUANTITY is revised.

4. On Page 4:

   Item No.'s 43 and 44, the PLAN QUANTITY is revised.
   Item No. 45 is deleted.

5. On Page 5: Item No. 55, the PLAN QUANTITY is revised.

6. On page 7: Item No.'s 85, 86 and 89, the PLAN QUANTITY is revised.

7. On Page 8: Item No.'s 99 and 100, the PLAN QUANTITY is revised.

8. On Page 9: Item No.'s 105 and 117, the PLAN QUANTITY is revised.

9. On Page 10: Item No. 119, the PLAN QUANTITY is revised.

10. On Page 12:

    Item No. 150 is deleted.
    Item No. 151, the PLAN QUANTITY is revised.

11. On Page 13: Item No.'s 160, 165 and 166, the PLAN QUANTITY is revised.

12. On Page 14: Item No.'s 176, 177 and 183, the PLAN QUANTITY is revised.

13. On Page 15:

    Item No. 191, the ITEM DESCRIPTION is revised.
    Item No. 192, the PLAN QUANTITY is revised.
    Item No. 194, the TOTAL AMOUNT DOLLARS is revised.

14. On Page 16:

    Item No.'s 199 through 202, 204, 205, 208, 210 and 211 the PLAN QUANTITY is revised.

15. On Page 17:

    Item No. 215, the TOTAL AMOUNT DOLLARS is revised.
    Item No.'s 217 and 220, the PLAN QUANTITY is revised.

16. On Page 19: Item No.'s 242, 245 and 246, the PLAN QUANTITY is revised.

17. On Page 23: Item No.'s 296, 297 and 308, the PLAN QUANTITY is revised.

18. On Page 24: Item No. 310, the PLAN QUANTITY is revised.

19. On Page 26:

    Item No. 340 is deleted.
    Item No.'s 350 and 351, the PLAN QUANTITY is revised.

20. On Page 27: Item No.'s 356, 361 and 362, the PLAN QUANTITY is revised.

21. On Page 28:

    The new Item No.'s 369 through 379 have been added.
    The ALTERNATE BID A1 and A2 have been removed.

22. On Page 29:

    The new Item No.'s 380 through 389 have been added.
    The ALTERNATE A1 ITEM No.'s have been revised.

23. Page 30 has been added. The ALTERNATE A1 and A2 ITEM No.'s have been revised.

24. Page 31 has been added.

TESC Plan Narrative/Project Cross-Sections

The TESC Plan Narrative and Project Cross-Sections for this project have been updated and revised and are available for the bidders review through the WSDOT Projects page at:

http://www.wsdot.wa.gov/Projects/I90/SnoqualmiePassEast/I90contractorinfo.htm

Bidders are instructed to revise sheets 756, 796, 797, 799, 801, 808 and 839 of the Plans as revised sheets have not been prepared for attachment to this addendum.

Bidders shall furnish the Secretary of Transportation with evidence of the receipt of this addendum. This addendum will be incorporated in the contract when awarded and when formally executed.

Don Whitehouse, P.E.
Regional Administrator

Attachment:

Sheets 2 through 17, 19, through 28, 31 through 43, 46, 175A, 175B, 177 through 181, 193, 194, 197, 202, 203, 237, 240, 243, 260, 261, 264 through 266, 268, 284, 272, 275A through 275K, 279, 280, 282, 283, 293, 294, 302, 366 through 369, 374, 376, 378, 382 through 386, 386A, 387, 388 through 395, 395A, 395B, 492, 493, 502, 505, 506, 522, 523, 525, 526, 550 through 558, 560, 561 through 563, 565 through573, 575 through 580, 585, 586, 607 through 612, 663, 665 through 667, 669, 679, 672 through 676, 680, 683 through 686, 696A through 696R, 735 through 738, 927 through 932, 934, 939, 943 through 950, 961, 962, 1047, 1064, 1065, 1066, 1066A, 1067 through 1069, 1070 through 1073, 1082, 1087, 1088, 1090 through 1092, 1096, 1097, 1107 through 1112, 1114, 1117 through 1122, 1125, 1126, 1128 through 1132, 1135 through 1140, 1143, 1144A, 1145, 1146A, 1148 through 1153, 1155 through 1160, 1173, 1174, 1177, 1179, 1182, 1188, 1189, 1223, 1223A, 1239, 1240, 1242, 1244 through 1247, 1251 through 1254, 1256, 1260 through 1265, 1268, 1269, 1272, 1273, 1277 through 1279, 1283, 1285, 1286, 1288, 1289, 1291, 1292, 1295 through 1300, 1302 through 1304, 1311, 1313, 1316, 1317 through 1321, 1323 through 1331, 1335 through 1343, 1347 through 1352, 1354 through 1356, 1358, 1359, 1362 through 1369, 1374, 1375, 1377 through 1382, 1386, 1390, 1391, 1394, 1396, 1399, 1401 through 1416, 1424A, 1425, 1426, 1429 through 1433, 1437, 1439 through 1442, 1445 through 1449, 1452 through 1456, 1461, 1461A, 1462, 1463, 1474, 1484, and 1490 (REV. 4/20/11)

Pages 1 through 5, 7 through 10, 12 through 17, 19, 23, 24, and 26 through 31 of the Proposal (Rev. 4/20/11)

Log of Test Boring for Hole No.’s CUL-021-10, CUL-022-10 and SCB-011-08.